

ANNUAL REPORT
OF
THE MINES BRANCH
OF THE
Department of Lands and Mines
OF THE
PROVINCE OF ALBERTA

1947



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Edmonton, Alberta,
February 19th, 1948.

TO THE HON. N. E. TANNER,
Minister of Lands and Mines.

SIR,—

I herewith submit the Report of the Mines Branch for the year ending December 31st, 1947.

Respectfully submitted,

JOHN CRAWFORD,
Chief Inspector of Mines.

ANNUAL REPORT OF THE MINES BRANCH FOR THE YEAR
ENDING DECEMBER 31, 1947

(JOHN CRAWFORD, *Chief Inspector*)

The output of coal produced from mines in the Province during the year 1947 was 8,074,596 tons, with a valuation of \$36,317,343. This shows a decrease of 749,859 tons under the tonnage produced in 1946, which was 8,824,455 tons, and an increase in valuation of \$3,120,082.

During the year, 107,409 manshifts were lost as a result of: (1) railway car shortage, (2) heavy snows and icing conditions at the beginning of the year causing a general slowing up of the industry and complete shutdown of some of the larger mines operating in the bituminous field. It is a pleasure to note that labour troubles, strikes and lockouts were at an all time low during the year, local disputes between mine workers and officials were adjusted on the job without loss of work.

The disposition of coal during the year was as follows:

	Tons
Sold for consumption in Alberta	1,671,130
Sold for consumption in other Provinces	3,120,721
Sold to the United States	91,235
Sold for shipment to China	27,731
Sold for shipment to Japan	14,461
Sold to railroad companies	2,504,604
Used in ship's bunkers	4,107
Used making briquettes	266,178
Used making coke	81,128
Used under colliery boilers	173,575
Used by colliery railroads	1,928
Put to stock	48,620
Put to waste	132,776

The above tonnages include coal lifted from stock and waste heaps, which is not included in the total output.

Of the above output, 1,880,579 tons were produced from 65 strip pits operating in the Province. During the year, production from stripping operations increased by 57,739 tons over the total figure for 1946, which was 1,822,840 tons. The increase in strip pit production can be attributed to two main factors, viz., four more pits in operation during the year as compared with the number in operation in 1946, and improved technique with respect to methods of extraction and equipment.

It should also be noted that had a plentiful supply of railway cars been provided, a much larger tonnage of strip coal would have been produced.

During the year, five shale pits produced 94,396 tons of shale and clay, from which 26,205,618 bricks and 23,778 tons of hollow tile were made. The production of shale and clay has increased by 23,708 tons during the year and the number of bricks made has increased by 5,908,338. A continued increase of hollow tile is also evidenced, amounting to 5,616 tons over the 1946 figure. The above figures indicate that continued progress is being made by the clay products industry.

There were 191 mines producing coal during the year, of which 12 were opened, 30 re-opened, 6 abandoned and 30 closed. At December 31st, 167 mines were in operation.

There were 9,405 men employed during the month of December, this being an increase of 37 over the corresponding month of 1946. It is significant to note that during the year there was a total of 1,230 miners' certificates, miners' provisional certificates and miners' permits issued by the inspectors, enabling the holders to proceed to the coal face as miners. Notwithstanding the issue of this large number of certificates, the records indicate an increase of only 37 men over the corresponding month of last year. This fact reveals that men entering the mines are not remaining there, but simply work for a few days or weeks as the case may be, until they secure other types of surface work. A condition such as this makes it very difficult to put any form of training scheme into effect. The mines of the Province are still short of trained help and especially need men for work at the coal face.

During the year, there were 4 first class or mine managers' certificates issued, 15 second class or overman's certificates, 31 third class or examiners' certificates, 4 mine surveyors' certificates, 4 first class mine electricians' certificates and 4 second class mine electricians' certificates granted.

In addition to the above, 19 examinations were held throughout the Province for coal miners' certificates of competency, and 416 certificates issued to successful candidates. There were also 586 permits as miners and 228 provisional certificates as miners granted.

Samples of mine air were taken during the year by the inspectors and forwarded to the Chemistry Branch of the Department of Mines, Ottawa, for analysis. This has been done in addition to the tests made with the M.S.A. methane and other gas detectors.

Samples of coal and coal-dust were collected and forwarded to the Research Council of Alberta, Edmonton, for analysis.

All fatal and serious accidents have been investigated by the inspectors, who also attended the inquests held in their districts, this being in addition to the regular inspection of the mines. All complaints made to the Department were also investigated.

There were 18 prosecutions instituted for contraventions of The Coal Mines Regulation Act, made up as follows: 1 owner, 3 mine managers, 3 overmen, 1 fireboss, 1 mine electrician, 2 timber packers, 4 miners, 2 machinemen, 1 tippie labourer.

The purchased electrical power by the mines was 47,892,597 k.w. hours, this being an increase of 1,880,182 k.w. hours over 1946.

This continued increase in the use of electrical power indicates that this form of energy, on account of its flexibility and higher efficiency value, together with its wider safety coverage, is the answer to our exacting power requirements in the mining industry.

There is still a shortage of certified mine electricians in the Province; however, each year sees an increasing number of such technicians entering the industry, fully certified and capable, and there is no doubt that in a matter of a few years the industry will be fully staffed with certified men, as this is a type of work that appeals to our returned men who have secured army training in elementary mechanics and electricity.

It will be noted from the reports of the district and electrical inspectors that in the matter of installation of new equipment, very satisfactory progress is being made.

The trend toward use of protective equipment in the mines is proceeding satisfactorily, there being in use during 1947: 5,214 hard

hats, 608 pairs of goggles, 299 pairs of knee caps, and 3,291 pairs of safety shoes.

The number of fatal accidents during the year was 15 as compared with 12 in 1946. This is an increase of 20% and equals 1.86 accidents per million tons of coal produced. This figure compares very favourably with the average rate in the United States and Great Britain.

In most cases the larger mines operating in the bituminous and sub-bituminous regions of the Province are faced with a definite bottleneck in their transportation systems, on account of the low efficiency of compressed air and storage battery methods of haulage. As a result, permission has been granted to the West Canadian Collieries Ltd. to introduce into their new Adanac Mine a Hunslet Mark II-50 H.P. flameproof Diesel Locomotive (this type being approved under the British Coal Mines Act), such permission being granted on an experimental basis, the terms of permission being highly restrictive in the interests of safety. Tests of the locomotive made by members of the Research Council and the Inspection Department of the Mines Branch indicate that this locomotive is operating very satisfactorily, and when the final tests have been made, they may show that this type of locomotive is the solution to the present bottleneck in our long haulage systems.

Miss G. Hunt, who had been connected with the office staff of the Mines Branch in the capacity of Secretary to the Chief Inspector, and in recent years Secretary to the Central Board of Examiners for the Province of Alberta, retired on the occasion of her marriage at Easter. The former Miss Hunt gained many friends among the coal mining industry during her 31 years of service with the Mines Branch.

Mr. W. Roy was appointed Secretary to the Chief Inspector of Mines in March, 1947.

During the year, the following appointments took place in the inspectorate:

Mr. John Thomson was appointed District Inspector of Mines with headquarters in the Provincial Building, Edmonton.

Mr. Robert Shaw was appointed Assistant District Inspector of Mines to the Drumheller Inspectorate.

Mr. Arthur Lister was appointed Assistant District Inspector of Mines to the Blairmore Inspectorate.

We regret to report that Alexander B. Hunter, a valued member of the inspection staff of the Mines Branch, Department of Lands and Mines, passed away in February, 1947, in the University Hospital, Edmonton, at the age of 61 years.

Mr. Hunter was born in the year 1886 at Slamannan, Stirling-shire, Scotland. He lived in the United States during his youth and received his early mining training at the Scranton School of Mines, graduating as a mining engineer. Mr. Hunter's first mine manager's position was at Bicknel, Indiana, at the age of 21 years. He subsequently served as manager in several other U.S. coal fields, and came to Alberta from Wyoming in 1911, where he became overman of the McGillivray Creek Coal and Coke Co. mine at Coleman, Alberta. In later years he held the position as manager of mines at Lethbridge, Redcliff, Wabamun, Commerce, Medicine Hat and Drumheller.

For the past 18 years he has been a member of the inspection staff of the Mines Branch, employed in the capacity of District Inspector for 13 years and Assistant Chief Inspector for five years.

Mr. Hunter is survived by his wife, three sons and four daughters.

SUMMARY OF INFORMATION COMPILED FROM THE REPORTS OF THE DISTRICT INSPECTORS

(J. A. DUTTON, *Assistant Chief Inspector, Edmonton*)

During the year a revision was made in the Monthly Report Forms submitted by the coal operators to this office and to the Dominion Bureau of Statistics, to furnish more useful information in connection with the distribution of outputs and classification of colliery employees. This revision caused much confusion with most operators in the industry, and necessitated extra office work to instruct them by mail of the correct procedure to be followed in filling out the new returns.

In the month of February a fire was discovered in the coal seam lying approximately six feet below the surface in the town of Castor. The burning was caused through the hot ashes from a newly installed underfeed stoker dropping into an ash pit which had been made in the seam. The fire had spread for a radius of 20 feet from the furnace before being noticed, and although fumes had been present in the store's concrete-lined basement for a few weeks prior, it was believed to be due to an incorrect mechanical adjustment of the stoker. In order to deal with this hazard, numerous holes were drilled into the concrete floor lying on top of the coal, into which water from the railway tank some three blocks distant was fed through the hose supplied by the town's fire fighting department. The concrete floor was then removed and the burning coals excavated.

I presided on the District Board of Examiners for the Edmonton District at an examination called by the late Mr. A. B. Hunter, District Inspector of Mines, Edmonton. Twenty-eight candidates presented themselves for the examination, all of whom were successful.

In addition to the above, nine provisional certificates and 22 miners' permits have been issued through this office.

Three visits were made to the Drumheller District: one in connection with the appointment to office of the Assistant District Inspector of Mines for that area; the second in connection with a dispute at one of the mines regarding the use of explosives, and the other to assist in the judging of the Mine Rescue Competition held in conjunction with the First Aid Competitions for that district. Five teams participated in each keenly contested event.

An official visit was also made to one of the mines in the Cascade Area with the inspector for that district, in connection with a series of "bumps" which had been occurring in the mine, and to discuss with the management of the mine the method of working the area subjected to these occurrences.

In addition to the above, several other visits have been made to mines to deal with complaints which have been brought to our notice, and for the investigation of accidents, mine inspections and other causes.

EDMONTON-CAMROSE INSPECTION DISTRICT

(J. THOMSON, *District Office, Edmonton*)

There were 78 mines operating in this district as of December 31, 1947, as follows: Camrose 5, Castor 19, Edmonton 26, Halcourt 5, Pembina 10, Prairie Creek 1, Tofield 5, Westlock 3, Wetaskiwin 2, Whitecourt 1, No Area 1.

Of this number 31 are strip pits located as follows: Camrose 4, Castor 6, Edmonton 6, Halcourt 3, Pembina 4, Westlock 3, Tofield 3, Whitecourt 1, No Area 1.

I made 133 inspections and investigated all serious accidents and complaints.

Miners' examinations were held in Edmonton, Round Hill, Hinton and Grande Prairie, 76 candidates passed the examination and were granted certificates. There were 80 miners' permits and 27 miners' provisional certificates granted from this office.

Eleven coal samples were taken and sent to the Research Council, University of Alberta, for analysis.

Four mine air samples were collected and sent to the Bureau of Mines, Department of Mines and Resources, Ottawa, for analysis.

There was one road allowance lease issued to G. Gwilliam, Boomerang Mine, Namao.

Eight trade names were registered under The Coal Sales Act.

There was one prosecution of an overman for failing to record a true report of his inspection in the book kept at the mine for the purpose, and failing to post a copy of his report in a conspicuous place on the surface.

Two new underground mines were opened: No. 1656 by Paul J. Offray at Wizard Lake, and No. 1657 by Opheim and Lidgett near Entwistle, both mines were opened by drift entrance. Two new strip pits were also opened: No. 1658 by Klapstein and Opalinski at Ellerslie and No. 1665 by Grettum and Sand at Edberg.

Two mines were abandoned: No. 1637, H. H. Wright, Genesee, and No. 1595, Yellowknife Transport Co., Genesee. Three mines were closed for an indefinite period: No. 1644 Strawberry Creek Coal Co. at Warburg, No. 1647 R. O. Johnston, Halcourt, and No. 1651 C. D. Grubb, Huallan.

Three mines changed ownership: No. 447 from C. Johnston to James and Boyce, No. 1046 from J. Cordel to The Battle River Coal Syndicate, and No. 1636 from D. Chiarello to John B. St. Martin.

There were no underground fires or ignitions of gas but a surface fire destroyed the tippie at Egg Lake.

Two domestic permits were issued during the year.

Eleven accidents were reported to this office—3 were from falls of roof, 2 from falls of coal, 3 from miscellaneous causes, and 3 on the surface. There were no fatal accidents.

The following is a list of the improvements and installations at the various mines in this district during the year:

Mine No. 29, Woytowich, a new slope has reached the coal seam and electric safety lamps installed.

Mine No. 99, Great West Coal Co. Ltd., a 36-inch picking belt on tippie. The 200 feet underground conveyor belts have been increased to 300 feet.

Mine No. 129, Sundance Mines Ltd., Caterpillar tractor, bulldozer blade, and Letourneau loader.

Mine No. 615, Komperdo Bros., one 75 K.V.A. 3-phase 60 cycle generator, one 5 B Sullivan coal cutter.

Mine No. 1034, Black Point Coal Co., one 15 K.V.A. generator, one 3 H.P. Siskol coal cutter, one 10 H.P. motor for hoist, one 3 H.P. motor for pump.

Mine No. 1046, Battle River Coal Syndicate, new tippie and complete new set of mine buildings.

Mine No. 1098, Long Coal Co., new tippie completed replacing the one destroyed by fire last year.

Mine No. 1206, Ryley Coal Co., one 25 K.V.A. generator, one 3 H.P. Siskol coal cutter.

Mine No. 1316, Samis Colliery, new bin for lump coal storage, a loud speaking system from the surface into the mine, which is proving to be a very satisfactory installation.

Mine No. 1366, Beverly Coals Ltd.—this mine has now abandoned the long wall system of working and returned to room and pillar methods.

Mine No. 1463, Riverdale Coal Co., new tippie, coal elevator and screening plant.

Mine No. 1496, G. Gwilliam, one Sullivan C.E. 7 coal cutter.

Mine No. 1562, North Star Coal Co., tractor, bulldozer blade, and loader.

Mine No. 1523, Picardville Coal Co., new tippie built replacing small structure.

Mine No. 1582, Egg Lake Coal Co., new tippie built replacing one destroyed by fire, one 25 K.V.A. generator, belt conveyor and screening equipment.

Mine No. 1587, J. J. Mills, one 15 K.V.A. generator, one 3 H.P. Siskol coal cutter.

Mine No. 1626, J. B. Starky Coal Co.—this mine is fully mechanized with 5 coal cutters and 4 duckbill loaders.

Mine No. 1641, Horkuluk, new slope has reached the coal seam, electric safety lamps installed.

Mine No. 1657, Opheim and Lidgett, Diesel driven compressor radial coal cutters, ventilating fan installed.

Mine No. 1646, John Mucha, tractor, bulldozer blade and loader.

Mine No. 1616, Pinto Creek Coal Co. Ltd., tractors, bulldozer blade, and loading equipment, a new road has been built for a distance of 10 miles on this property.

CALGARY INSPECTION DISTRICT

(W. E. G. HALL, *District Office, Calgary*)

There were 25 mines operating in the Calgary District during the year 1947 up to May 9th, when due to a reorganization of the inspection districts, 10 operating mines were turned over to the Drumheller District, leaving 15 mines in this district operating to December 31st.

At the present time there are only two strip pits in the district, both mining bituminous coal. Production at Mine No. 1667, oper-

ated by the Kananaskis Exploration and Development Co., has just begun, while production at the strip pit operated by the Brazeau Collieries Ltd. has been steady all year. Any slacking off of production from the underground mines due to labour shortage and holidays has been taken up by the strip pit.

During the year there were 58 inspections made and reported upon, in accordance with Section 5 of The Coal Mines Regulation Act.

There were 51 miners' permits and 11 provisional certificates issued by this office during the year.

Eight coal samples were taken during 1947, all of which were forwarded to the Research Council for analysis.

During the year there were two applications for road allowance leases made and reported upon by this office.

Only one trade name was issued during the year, viz., Mine No. 1667, Kananaskis Exploration and Development Co., the name of their coal being "Cascade Coal."

Underground Mine No. 194, closed for a number of years, was re-opened by the Knee Hill Coal Co. as a strip pit mine. This mine is among those turned over to the Drumheller District.

Mine No. 1638 previously operated by Ernest Payne was taken over by the Western Canada Coal Corporation.

It is regretable to report that there were four fatal accidents in the district during the year. Three of these occurred at the mines operated by the Brazeau Collieries Ltd., while the other occurred at the mine operated by the Bighorn and Saunders Creek Collieries Ltd., and was a surface accident. In this case the man died in the hospital 10 days after the accident occurred.

In addition to the four fatalities, there were 18 accidents reported direct to this office, this being one more than reported during the year 1946. Of the 18 accidents reported, 6 occurred on the surface and the balance underground.

The mines in the district were entirely free from labour trouble during the year. At the Brazeau Collieries Ltd., their mines were closed down for $33\frac{1}{3}$ days during the year due to a shortage of railroad cars. This was the only mine in the district where time was lost from this cause; however, an additional $10\frac{1}{3}$ days were lost through other miscellaneous causes.

The Bighorn and Saunders Creek Collieries Ltd. lost two days due to extreme cold weather.

As regards the man-power situation in this district, I wish to report that the Brazeau Collieries Ltd. are understaffed. At the Canmore Mines Ltd. the man-power problem is still reported as being generally below par, and a similar condition exists at the Bighorn and Saunders Creek Collieries Ltd. The Alexo Coal Co. mine was understaffed by approximately 30%.

There has been an increase in the use of hard hats in the district, especially at the Canmore Mines Ltd., which is now equipped 100% with such headgear. I am endeavouring to have the rest of the mines in the district so equipped.

The following is a list of the improvements and installations at the various mines in this district during the year:

At Mine No. 2, operated by the Canmore Mines Ltd., the following have been reported: 1 K-R-11 International truck has been put

into operation; 1 T-D-14 International bulldozer with shovel has been secured and put into operation; 1 double truck garage has been built; 1 pair of H.R.T. boilers of welded construction were installed, equipped with Foster-Wheeler spreader type stokers.

At Mines Nos. 256 and 1585, operated by the Brazeau Collieries Ltd., the following has been reported: 1 new wooden bin for strip pit coal with a capacity of 250 tons has been built; 1 new link belt chain cooling conveyor, 130 ft. centres, for No. 5 briquette plant has been installed; 1 new link belt chain cooling conveyor, 80 ft. centres, for No. 4 briquette plant has been completed.

At Mine No. 388, operated by the Bighorn and Saunders Creek Collieries Ltd., the following has been reported: 4 new Tugger hoists have been installed.

LETHBRIDGE INSPECTION DISTRICT

(E. H. MORGAN, *District Office, Lethbridge*)

The total number of mines operating in this district during the year amounted to 25.

There were 7 strip mines in operation as compared with 6 in 1946—1 at Eyremore, 2 at Taber, 2 at Grassy Lake; each of these have a very substantial output and are well equipped. The other two are small, one being near Milk River and the other near Lethbridge. It should be noted that a large portion of the coal produced at open strip mines could not be mined by underground methods, the section being so small, in one instance only 13 inches, and the lack of sufficient cover would create in some cases insurmountable difficulties.

During the year there were 94 inspections made and reported on (this includes 4 inspections made by J. D. B. Brown during my vacation). All complaints and serious accidents were investigated. There were 50 inspections made and reported upon for the Workmen's Compensation Board.

This office issued the following certificates during the year: Miners' certificates, 16; Miners' permits, 106; Miners' provisionals, 23.

Three trade name certificates were issued during the year, viz., Mine No. 1659, Vicoal; Mine No. 1509, Champion Coal; Mine No. 672, Leland Coal.

One new mine opened in this district during the year.

No mines were abandoned. However, two mines closed down operation.

The following mines changed ownership: No. 772, from Ajax Coal Co. to Naco Coal Co.; No. 1301, from Thomas Taylor to Steve Wargo and Partners; No. 1334, from Southern Alberta Coal Co. to Continental Coal Corp.; No. 1509, from A. M. S. McGaw to Peter Fontana and Sons; No. 1580 from Southern Alberta Coal Co. to Continental Coal Corp.; No. 1602, from McArthur and Allen Cons. Co. to Vulcan Mining and Cons. Co.

The mines were free from gas ignitions and free from mine fires.

I am pleased to say that we had no fatal accidents in this district during the year; the number of accidents reported to this office was 21, the same number as in 1946. Nineteen of these accidents oc-

curred below ground; the others occurred at the surface of the Galt Mine, one in the switching of railroad cars, and the other in the unloading of pit-props out of a railroad car.

During the year labour trouble was at a minimum. Whatever disputes management and labour might have had were successfully ironed out by the process of negotiation, much to the credit of both parties concerned.

There was a shortage of railroad cars that caused Mine No. 1464 a loss of 3½ days, and they lost another day due to a ban on the road on account of the spring thaw.

Lethbridge Mines Nos. 1263, 1095 and 1581 lost about 4 days each due to lack of railroad cars, and Mine No. 1263 lost 4 days due to the road being banned. Mine No. 1095 lost 6 days and Mine No. 1581, 11 days on account of the road being banned due to the thaw.

There is still a man-power shortage in this district, although I have issued 106 miners' permits and 23 provisionals, mostly to men new to the district. My opinion, based on information given me at the mines, is that of the certificates issued, only 20 to 25% of the newcomers stay on as miners.

The following is a list of installations and improvements which have taken place at the various mines in this district during the year:

Standard Mine No. 1263, at Shaughnessy, Alberta, operated by the Lethbridge Collieries Ltd., installed: 1 Huwood drill, 1.2 H.P., 220 volt 3 phase squirrel cage motor and magnetic switch; 3 Chicago pneumatic drills, 3 phase induction motor, 1 H.P. 220 volt fuse and switch; extension to tipple: 1 shaker screen for screening stove coal, driven by 10 H.P. 3 phase induction, 440 volt Fairbanks Morse motor with C.G.E. CR 7008 switch, and one 20" Delta band saw driven by 1 H.P. motor, C.G.E. C.R. 1061 switch.

Galt Mine No. 1464, near Lethbridge, Alberta, operated by the Lethbridge Collieries Ltd.: No. 6 bore-hole was drilled so as to keep the 220 volt cable from surface as near to the working faces as possible; the 45 H.P. motor of the main ventilating fan has been replaced by a 75 H.P. motor, so as to increase the ventilating current; the chute from rotary dump at tipple has been lined with 1 inch rubber over an area of 152 square feet to reduce breakage.

Chester Mine No. 1095, operated by Chester, Crabb and Chester, near Lethbridge, Alberta: One 15 H.P. 220 volt 3 phase C.I., 1 group D. G.E. motor and centrifugal pump; one 2 H.P. 220 volt 3 phase C.I. 1 group D Westinghouse motor; one CR 7006 220 volt 3 phase C.I. 1 group D. G.E. magnetic switch, 15 H.P. maximum; One CR 1062 E3B 220 volt 3 phase group D. G.E. motor starting switch; on the surface they built a new office.

COALSPUR-MOUNTAIN PARK INSPECTION DISTRICT

(A. MUIR, *District Office, Edson*)

There were 10 underground mines operating in this district during the year and, in addition, 8 strip mining operations.

The strip mines mentioned above comprise: Mountain Park, King Coals, Cadomin, Gregg River, Luscar, Sterco, Coal Valley. Sterco and Coal Valley are producing their whole daily output from this source.

There were 90 complete inspections made during the year, additional visits were made to various mines on official business.

Examinations were held for miners' certificates at various towns on the Coal Branch, a total of 26 candidates emerged successful. Six provisional certificates and 59 miners' permits were also issued.

Several mine air samples were taken at Mercoal in connection with the heating of an outcrop. These were forwarded to the Chemistry Branch of the Department of Mines and Resources at Ottawa for analysis.

One new trade name was registered during the year, viz., Mine No. 1392, Gregg River Coals Ltd.

Ten prosecutions were instituted for contraventions of the Coal Mines Regulation Act as follows: Gregg River 2, Luscar 2, Mercoal 2, Hinton 2, Sterco 1, Coal Valley 1.

Luscar No. 1 has been permanently abandoned and Lakeside Coals Ltd. has been closed all year.

I wish to report that no ignitions of mine gas or mine fires have taken place during the year, with the exception of a condition found at the McLeod River Hard Coal Co. mine at Mercoal. A portion of the upper old workings had developed into a state where it gave off quite a volume of heat; an opening to the surface from these old workings had provided the nearby residents with a natural place to dump their waste. This had been going on for quite a considerable length of time, and as it was on the outcrop it contributed to an ideal condition for the commencement of spontaneous combustion. However, after a lengthy period of work the condition was brought to a normal temperature and all seals completed.

There were 5 fatal and 20 serious accidents, all of which were investigated.

Labour troubles were practically nil, conditions seemed to be satisfactory, and it would appear that co-operation was very good from all angles.

The Coal Branch has been seriously affected again through lack of railroad cars. I am quite sure that the tonnage from this area would have been much greater if said cars had been available.

In general, conditions on the Coal Branch have improved considerably, and it appears that 1948 will introduce quite a number of extra strip pits. This type of mining has quite a production advantage.

The following is a list of the changes and improvements which have taken place at the various mines in this district during the year:

At the Cadomin Coals Ltd., Mine No. 693, the following new equipment has been purchased for above and below ground: 3 trucks; 150 H.P. Harland pump for shaft mine; installed pulverizer for Assay Office; constructed 60-ton laminated rock bin; built bunkhouse and watchman's dwelling; 2½ cu. yd. Bucyrus Erie Diesel driven shovel with dragline attachment; Coppus Blower No. P.300; 2 sump pumps for West Mine slope; new oil house built and gas pump installed; outside stable built at West Mine; steel frame for wet washery building erected.

At Gregg River Coals Ltd., Mine No. 1137, a new tippie has been erected and extra storage tracks have been provided. A few huts that were used by Fred Mannix Co. have been taken over by the Gregg River Coals.

At Mines 905 and 1617, operated by the Luscar Coals Ltd.: 2 boilers have been installed at No. 4 and 5 mines for radiator purposes; 2 Mecco pan conveyors were installed at No. 3 mine for the purpose of extracting the coal on the anticline which otherwise would be lost by pitch seam method. The following new equipment has been secured for strip pit use: 1 Oliver Cletrac bulldozer, 1 Sullivan rotary drill, 1 LaPlante-Choate rooter, 1 pulverizer for coal samples, 1 9"-10" steam hoisting engine, 1 Willys jeep, 1 International KR-11 truck, 1 International TD-6 with Doser shovel, 1 Adams No. 501 motor grader, 2 LeRoi portable compressors, 1 LeRoi wagon drill, 1 29-passenger bus, 2 Euclids, 1 Bycyrus-Erie Model 54-B 2½ yard power shovel, 1 Herman Nelson portable heater.

At McLeod River Hard Coal Co. Mine: A new 5 stage centrifugal pump was installed on the No. 4 West Level, capacity 450 Imperial gallons per minute, driven by a 2300 volt 150 H.P. motor, direct connected, the installation is contained in a reinforced concrete housing. On No. 3 West Level a trolley locomotive haulage system was installed using a 13 ton Baldwin-Westinghouse unit, operating at 225 volts D.C. Power is supplied from the surface at 2300 volts through armored cable to a Hewittic rectifier where it is transformed to direct current. The rectifier and controls are housed in a reinforced concrete structure. Two B and W water tube boilers have been installed and put into service, each has a capacity of approximately 1000 H.P.; the boilers are equipped with modern automatic controls and all necessary auxiliary equipment, the installation is housed in a steel frame building. A sewer system and disposal tank have been installed to serve the business section of the town. The water system has been extended to supply the growing requirements of the community. A new siding has been put in to give extra storage space for empty railroad cars. Six new dwellings have been constructed, a club room has been built for the Legion, and the School Division have erected a building for shops, office and storeroom.

At the Foothills Collieries Mine: 1 new 270 H.P. H.R.T. boiler with water cooled walls was installed, settings for same were all rebuilt. A new Ottumwa railroad car loader for loading lump coal was installed.

At the Coal Valley Mining Co. Mine: A new storage bin, capacity approximately 70 tons, was installed in the boiler house, complete with a bucket elevator, 24" conveyor belt, storage hoppers and chutes. A new bath house was constructed.

Fred Mannix Co. have completed their job on the Coal Branch, and the various coal companies are now performing their own stripping operations. A. A. Voice contractors are still stripping for Mountain Park Coals.

CROWSNEST INSPECTION DISTRICT

(J. D. B. BROWN, *District Office, Blairmore*)

With the advent of 1947, ten mines were in operation in this inspectorate. Of this number, 2 mines were closed down, 1 temporarily and the other permanently. This left 8 mines in operation at the close of the year.

There are three strip operations in this district at present, and two of them were put into operation during the year.

The International Coal and Coke Co. of Coleman opened a strip mine approximately one mile beyond their York Creek installation, and a substantial production is being yielded to augment their underground tonnage.

The Greenhill Mine, West Canadian Collieries, Blairmore, have added another strip mine to the one already in operation. This recent addition has been operated entirely by their own staff who have shown considerable ability in this new departure from underground technique.

There were 178 days spent in making 70 complete mine inspections. Seven days were utilized in holding examinations for miners' certificates. Investigations were carried out in connection with man-trips and explosive hazards in strip pits; all serious accidents were investigated and inquests attended.

Inspection visits were made to the Lethbridge Area during the absence of Mr. E. H. Morgan, District Inspector, which included two visits to the St. Mary's River Dam Diversion Tunnel, where a fatality had occurred.

Test work has been carried on in connection with the new Diesel locomotive that has been put into service at the Adanac Mine, Bellevue. Mr. McCulloch, Chief Chemist of the Research Council of Alberta, and his assistant, Mr. Bridge, were present at several of these tests, and made a separate report to the Chief Inspector.

Examinations for miners' certificates were held periodically throughout the year, and 74 certificates were granted.

There were 96 miners' permits and 47 provisional certificates issued.

Five coal samples were collected and forwarded to the Research Council for analysis, together with 14 samples of mine dust.

Ten mine air samples were taken in conjunction with ten Diesel exhaust samples, and all were sent to Ottawa for analysis. Results of the various samples tested have governed the procedure adopted in connection with the operation of the Diesel locomotive.

Five workmen were prosecuted during the year for having in their possession prohibited articles, and one fireboss was also prosecuted for an infraction of the explosive regulations, convictions being obtained in all cases.

Blasting practices at strip mines have received considerable attention; an accident to three men due to a premature blast entailed some revision in methods of charging "sprung" holes.

Reports of 69 accidents were received at this office during the year, and of this number 3 were fatal, 38 were classed as serious, and the remaining 28 classified as minor accidents. These figures show a regrettable increase over the figures of last year, and an examination of the causes of the above accidents show nearly 50% were due to some degree of carelessness on the part of the injured workman.

This district has not been burdened with labour troubles. However, there were several periods during the year when railroad cars were in short supply, and the time lost at the various mines averaged about 11 shifts for each mine.

The following is a list of the changes and improvements which have taken place at the various mines in this district during the year:

During the latter part of the year a Diesel locomotive was placed in operation at the Adanac Mine, West Canadian Collieries. This, I believe, is the first Diesel locomotive to be operated in a coal mine in Canada, and as little information or practical knowledge was available, a considerable time was spent in checking on its safe operation, and a scrutiny of the potential hazards was made during the remainder of the year. Mr. McCulloch and his assistant made a series of tests with a portable carbon-monoxide indicator which reads to .002%, and a similar instrument will be in our hands soon. Tests conducted seemed to indicate that to date no hazards have presented themselves. The Diesel is operated in a circuit of air, none of which enters any active working face, in other words a separate split of air, and the only person exposed to the potential hazards is the operator and those persons who are working on the haulage road where the Diesel operates. An ample supply of air is maintained, and the success of the operation rests on proper maintenance of the engine, the daily changing of the exhaust flame arresters and the maintaining of the proper water level in the exhaust gas cooling system, also having an ample supply of air in circulation.

The Adanac Mine have also installed 6 electric duckbills, hoists, coal cutters and conveyors are also electrically operated. All equipment is either Buxton or U.S. Bureau of Mines approved. The trailing cables, where in use, are of the screen grid type to reduce accidents due to handling same.

The Hillcrest Mohawk Coal Co. have installed the following equipment at their No. 5 Mine: 2 locomotive type low pressure boilers for heating their new wash-house and other offices. Purchased a 9½-ton Goodman battery locomotive which will be in operation soon. Constructed a brick fireproof building to house the locomotive, and a charging station for the battery locomotive. A 300 H.P. 1700 cu. ft. per min. air compressor has been installed. A powder magazine and a detonator magazine have been constructed. A Sullivan fan to produce 75,000 cu. ft. per min. against a WG of 1¼" has been erected and placed into operation. Twenty Hugh Wood air picks and 6 No. 30 jackhammers, a power water liner and a Radialax coal cutter have been purchased and are now in use underground.

The Greenhill Mine, West Canadian Collieries Ltd., have almost completed a 25 tons per hour briquette plant, and they have installed some new screening equipment to facilitate sizing at the tipple. A rotary dump and storage bin have been installed at Boisjoli, also a new power line together with an electrically driven 1700 cu. ft. per min. air compressor. At the new slope they have installed a new fan with a capacity of 60,000 cu. ft. per min. against a WG of 2". At Cougar North another fan has been placed into operation, and this fan is similar to the one mentioned directly above. A concrete overcast has been built on No. 5 Level.

In connection with the new strip mine operated by the Greenhill Mine, they are now using the following equipment purchased recently: 1 Dominion 2-yard shovel; 3 bulldozers; 2 rock wagons; 1 portable Ingersoll-Rand air compressor; 1 wagon drill. They have erected buildings to house this equipment, and there are repair shops and storage rooms to service same.

The Adanac Mine, West Canadian Collieries Ltd., have installed the following equipment underground; 5 G 12½ duckbills; 1 G 15

duckbill; 1 Pickrose electric hoist, 15 H.P.; one Hugh Wood 20" belt conveyor, electric drive; one Sampson coal cutter, electric drive; one Diesel Hunslet 50 H.P.; and replaced much of the track with 60 lb. steel.

On the surface they have installed a garage to house the Diesel locomotive and installed a gravity rotary dump, 350 KVA transformer. A Diesel operated air compressor has been converted to electricity, using a 100 H.P. motor. An 80,000 cu. ft. per min. fan has been installed to ventilate part of the mine against a WG of $1\frac{1}{4}$ ". A new building to house the first aid room and offices of fireproof material have been erected. All buildings at this mine are fireproof.

They have also purchased for use underground, 25 3-ton roller bearing mine cars; 2 Hugh Wood compressed air drills; 1 Anderson and Boyes electrically driven coal cutter, 50 H.P. All switch gear is Buxton approved, and all the equipment used underground is either Buxton or U.S. Bureau of Mines approved.

The Bellevue Mine have installed the following equipment underground: 1 Gardner-Denver loader; 2 compressed air operated duckbills; an electrically operated 25 H.P. main and tail hoist; also additional electric cables have been installed to increase the capacity (power) underground.

On the surface they have installed an automatic stoker on the heating boiler which supplies heat to the plant.

At the McGillivray Mine they have installed a fan at "D" Level with a capacity of 30,000 cu. ft. per min. against a 1" WG; they have erected two conveyor belts, one 250' long and the other 30' long; also built a bin to take the coal hauled by truck from outside loading points.

On the surface of the International Mine they have extended the electric pole line to the strip mine operation, built coal bins, and installed a coal crusher and a conveyor for the convenience of the strip coal. The strip mine came into production this fall. They have made some major changes in the layout of the tippie, equipment being moved from the old part to the new, and unit heaters have been installed to assist in coal drying.

DRUMHELLER INSPECTION DISTRICT

(JAMES HORNE, *District Office, Drumheller*)

During the year there were 72 mines operating in this district, distributed as follows: Drumheller 24, Rosebud 3, Beynon 1, Standard 1, Gleichen 1, Hanna 4, Sheerness 3, Delia 3, Big Valley 3, Three Hills 1, Trochu 4, Ghost Pine 3, Ardley 3, Delburne 4, Nevis 2, Alix 3, Castor 4, Halkirk 3, Gadsby 2.

There were 16 strip pits operating in this inspectorate, to which there has been added four new operations: No. 1662 Red Deer River Coal, No. 1663 Martin Coals, No. 1666 Livingstone Coals, and a pit on the same coal lease as No. 291, James Chiswick.

Strip pits supplying local truck trade have not been as active as during the preceding year; some small underground operations are also working on short time, this is probably the result of exceptionally good weather conditions.

All the mines in the Valley have had a busy year. In most instances the summer holidays were utilized in making surface and underground improvements.

A shortage of experienced miners continues, this being most evident in the East Coulee section. Absenteeism is a general complaint.

During the year, 205 complete mine inspections were made. In addition to the regular inspection of the mines, all serious and fatal accidents have been investigated and all inquests have been attended.

Messrs. J. T. Burton, manager, and J. Conroy, miner, were appointed to the Miners' Examination Board.

Miners' examinations for "A" Class certificates were held at Drumheller Jan. 23rd, May 2nd and Sept. 11, 1947; at East Coulee Sept. 12th, and at Trochu Aug. 14th, 1947. There were 146 certificates issued.

During the year, 105 miners' provisional certificates and 172 miners' permits were issued.

At No. 346 Rosedale Collieries, No. 5 seam, 1 coal sample was taken and forwarded to the Research Council, Edmonton, for analysis.

From Midland No. 367, 5 samples of mine air were taken and forwarded to the Department of Mines and Resources, Ottawa, for analysis.

There were 12 trade name certificates registered during the year.

During the year 5 prosecutions were instituted and 5 convictions obtained for contravention of the C.M.R.A.

Five new mines were opened during the year, viz., No. 1655 Munson Hill, No. 1660 Ball Mine, No. 1662 Red Deer River Coal, No. 1663 Martin Coal, No. 1666 Livingston Coal.

Two mines were abandoned, viz., No. 1189 J. McKinley and Sons, No. 844 Ideal Coal Co.

Four mines were closed temporarily, viz., No. 486 Litke Bros., No. 694 J. R. Hodgson and Sons, No. 913 Ben Hronek, and No. 1621 Sarcee Coal Co.

Three mines were reopened, viz., No. 1436 Royalty Mine, No. 1515 Foye Mine, and No. 1544 Castle Mine.

The following changes of ownership occurred: No. 728 Maple Leaf Minerals Ltd. to Maple Leaf Coal Co. Ltd.; No. 1511 Aetna Coal Co. to Aetna Coals Ltd.; Nos. 422 and 1484 Regal Coal Co. Ltd. to Nos. 422 and 1484 Century Coal Co. Ltd.

Two mine fires and one heating occurred in this district during the past year:

At Midland No. 367 heating was discovered on Jan. 6th in the old workings south of the main shaft. This portion of the mine has been permanently sealed.

At Star Mine No. 436, on January 6th, at the face of No. 11 North Entry, fire was caused by a pellet powder shot; the fire was immediately extinguished.

At Hy-Grade Mine No. 1421, on Nov. 14th, at the face of 78 Entry, fire was caused by a pellet powder shot; the fire was immediately extinguished.

In addition to the above, fire destroyed the main office and a bunk house at the Rosedale Collieries; a new main office and two bunk houses have been erected.

One domestic permit was issued, viz., Mine No. 397 in the name of "Richard Morland".

There were a total of 88 accidents reported to this office during 1947.

The following is a list of the changes and improvements which have taken place at the various mines in this district during the year:

Mine No. 346, Rosedale Collieries, installed 150 P Model electric cap lamps, Goodman track mounted slabbing machine, 2 Goodman track mounted loading machines, and 1 Goodman 5-ton trolley locomotive. The foregoing occurred at No. 1 seam.

No. 5 seam, Mine No. 346, installed 1 8-ton Goodman trolley locomotive, 2 Goodman shaker conveyors, two Goodman shortwall undercutters, and 1 Goodman belt conveyor. A main office, cook-house and two bunkhouses have been erected, and all the company owned dwelling houses have been overhauled.

Mine No. 402, Red Deer Valley Coal Mining Co., installed 100 H.P. M.G. set housed in a flame proof vault; 1 Goodman 30" belt conveyor, 960 ft. in length with 20 H.P. C.G.E. motor and reversible starting gear; 2 G 20 B77 duckbill units; 3 Little Giant permissible coal drills, and 1 Buxton approved 5 H.P. Pinkrose electric hoist.

Mine No. 422, Commander Mine, installed 1 permissible "Atlas" storage battery locomotive with M.G. set housed in a flame proof vault, and a 15-ton Fairbanks Morse scale; a frame addition to the wash-house 26'x32'.

Mine No. 436, Star Mine, installed 1 M.G. set for battery charging and "Hertner Automatic" control panel, house in flame proof vault.

Mine No. 620, Newcastle Collieries, installed 100 H.P. Leonard and Sons steam engine for main fan drive.

Mine No. 1258, Brilliant Coal Co., installed 1 B7 Sullivan permissible undercutter; 1 Pyranol 50 K.V.A. transformer.

Mine No. 1299, Empire Mine, installed: 1 6-ton Mancha storage battery locomotive and a single stage 20 H.P. direct connected centrifugal pump.

Mine No. 1421, Hy-Grade Coal Co., installed 1 B7 Sullivan permissible undercutter and a "Huwood" Buxton approved rotary drilling machine.

Mine No. 1436, Royalty Mine, installed 1 C.E. 7 Sullivan undercutter.

Mine No. 1484, Atlas Mine, installed 1 Atlas 6-ton battery locomotive and M.G. set housed in a flame proof vault, and 1 Pyranol 50 K.V.A. transformer. A 36'x16' frame addition to the wash-house and two bunk houses 40'x20' have been erected.

Mine No. 1491, Murray Collieries, installed 1 2-H.P. Fairbanks Morse motor for portable typhoon pump.

Mine No. 1493, Western Gem and Jewel, installed 1 20-ton Gurney scale.

Mine No. 1570, Sovereign Mine, installed 1 B7 Sullivan permissible undercutter.

Mine No. 1573, Western Monarch, installed 1 Goodman G20/B77 permissible shaker conveyor; 1 B7 Sullivan permissible undercutter

complete with power take-off and bug duster; 1 5-ft. air vane main ventilating fan and a frame workshop and storehouse 30'x24'.

Mine No. 710, East Trochu Coal Co., installed 1 2-H.P. English electric motor drive for Smart Turner pump and 1 Siskol electric header, Boxton approved.

Mines Nos. 1322, 1436, 1655, 1660: small tipples have been erected.

A belt conveyor installation of 960 ft. has been made in No. 2 mine of the Red Deer Valley Coal Co.; 4 duckbill units will serve the installation. A similar construction is in progress in No. 5 seam of Rosedale Collieries.

ELECTRICAL INSPECTION OF MINES

(BURTON TAIT, *Electrical Inspector of Mines*)

During the year there were 83 mines in the Province using electrical equipment above or below ground or both. In addition to these, 9 small mines use electric cap lamps, battery charging apparatus or electric signals. All mines in the Province where explosives are utilized now use electrical shot-firing apparatus and a great many use electrical gas detecting devices.

All mines using electrical apparatus have been inspected during the year, except two small mines which use only six or seven mine lamps. There were 98 complete inspections and 10 partial inspections made. One inquest was attended in Drumheller.

One prosecution was instituted for contravention of The Coal Mines Regulation Act, a conviction being obtained against a mine electrician.

One fatal accident caused by electricity occurred during the year, said accident took place in the Edmonton District. An overman who was in charge at the mine pushed a 20-foot length of pipe up against an overhead high voltage line. No other lost time accidents caused by the use of electricity were reported to this office.

The following mines started using electrical equipment during the year:

Ryley Coal Co., near Ryley, installed a 15 KVA, 550 volt, 3 phase generator and transformers to supply a Siskol coal cutter and small pump underground.

The J. J. Mills Mine near Heisler installed a 15 KVA, 220 volt generator to supply a Siskol coal cutter and pump.

Komperdo and Partners Mine near Heisler installed a 75 KVA, 2300 volt generator to supply a Sullivan coal cutter and pump. An electric hoist is to be installed shortly.

Egg Lake Coal Co. Strip Mine near Morinville installed a 27½ KVA, 220 volt, 3 phase generator with a connected load of 25 H.P. in motors on tiple and for pumping.

Gregg River Collieries Ltd. near Luscar installed a 125 KVA, 2300 volt generator and motors totalling 145 H.P., all above ground.

Black Point Mine near Edmonton installed a 15 KVA, 220 volt, 3 phase generator to supply a Siskol coal cutter, slope hoist, fan and pump, with motors totalling 18 H.P.

East Trochu Coal Mine near Trochu installed one Siskol coal cutter and about 10 H.P. above ground.

Morinville Collieries Mine near Morinville installed motors above and below ground totalling 65 H.P. This mine is supplied with power by the Calgary Power Co.

Major electrical installations in and about mines during 1947 are as follows:

The Adanac Mine of the West Canadian Collieries Ltd. has been completely electrified. Six duckbill loaders, 4 hoists, 1 coal cutting machine and 2 transformer installations have been made underground. All motors, switch-gear, starters, etc., are of approved flameproof design. Cables are armored and flexible cables are of the screened type. Proper circuit protection as well as earth leakage protection is incorporated in the switch-gear.

McLeod River Hard Coal Co. (1941) Ltd. have installed trolley locomotive haulage on their third level in the mine. Supply of current for the trolley is obtained from a Hewittic rectifier installation, housed in a fireproof vault in the mine. The locomotive is a 13-ton Baldwin-Westinghouse.

Luscar Coals Ltd. installed a main and tail hoist with a 150 H.P. 550 volt motor and controls.

Hillcrest Mohawk Collieries Ltd. installed a 300 H.P. 2300 volt synchronous motor on a compressor.

Rosedale Collieries Ltd., Rosedale Mine, installed 1 8-ton and 1 5-ton Goodman trolley locomotive, 1 Goodman track mounted face loader and a motor generator set with a 225 H.P. 2300 volt motor.

Red Deer Valley Coal Co. Ltd. installed trolley locomotive haulage underground, also two conveyors.

International Coal and Coke Co. Ltd. extended their 6,900 volt transmission line to York Creek and installed a pole top switch. Motors totalling 325 H.P. were installed above ground.

There have been numerous smaller installations of electrical equipment during the year. Apart from lighting and heating, the horse-power of motors installed during 1947 totals 3406 H.P.

At December 31st, 1947, the total H.P. of motors in use (connected load) was: Above ground 40,279 H.P., underground 15,131 H.P., total 55,410 H.P.

Number of electric coal cutting machines	166
Number of trolley locomotives	19
Number of battery locomotives	39
Number of electrically operated conveyors	38
Number of track mounted face loaders	1
Number of electric coal drills	52
Number of miners' electric safety lamps	6062
Number of telephones underground	200

The majority of electrified mines are supplied with power from central stations. We have in addition local steam plants with a capacity of 9,030 KVA and gas and diesel plants with a capacity of about 805 KVA.

Four trolley locomotives, several duckbill loaders, 11 coal cutting machines and 1 face loader have been installed underground during the year.

A number of small mines in areas not supplied with power by central stations are installing their own plants powered mostly by diesel or gas engines.

All new installations are being made in accordance with recognized standards, and the maintenance of existing installations is receiving proper attention in most cases.

Electrical apparatus in dusty locations in tipples and cleaning plants is being installed in accordance with rules governing hazardous locations.

ANNUAL PRODUCTION OF COAL FROM MINES IN THE PROVINCE OF ALBERTA

The following table is taken from a report prepared by the Dominion Bureau of Statistics and published in "Coal Statistics for Canada" for the year 1946:

Calendar Year	Short Tons	Value
1886	43,220	\$ 81,112
1887	74,152	157,577
1888	115,124	183,554
1889	97,364	179,640
1890	128,753	198,298
1891	174,131	437,243
1892	178,970	460,605
1893	230,070	586,260
1894	184,940	473,827
1895	169,885	382,526
1896	209,162	581,832
1897	242,163	630,408
1898	315,088	787,720
1899	309,600	774,000
1900	311,450	778,625
1901	340,275	850,687
1902	402,819	960,601
1903	495,893	1,117,541
1904	661,732	1,404,524
1905	931,917	1,993,915
1906	1,246,360	2,614,762
1907	1,591,679	3,836,286
1908	1,685,661	4,127,311
1909	1,994,741	4,838,109
1910	2,894,469	7,065,736
1911	1,511,036	3,979,284
1912	3,240,577	8,113,525
1913	4,014,755	10,418,941
1914	3,683,015	9,350,392
1915	3,360,818	8,283,079
1916	4,559,054	11,386,577
1917	4,736,368	14,153,685
1918	5,972,816	20,537,287
1919	4,933,660	18,205,205
1920	6,907,765	30,186,933
1921	5,909,217	27,246,514
1922	5,990,911	24,351,913
1923	6,864,397	28,018,303
1924	5,189,729	18,884,318
1925	5,869,031	20,021,484
1926	6,503,705	20,886,103
1927	6,934,162	21,982,058
1928	7,336,330	23,532,414
1929	7,150,693	22,928,182
1930	5,753,528	18,063,225
1931	4,564,015	13,342,675
1932	4,870,648	13,526,309
1933	4,718,788	12,307,258
1934	4,753,810	12,556,099
1935	5,462,894	14,094,795
1936	5,696,960	14,659,705
1937	5,562,839	14,563,911
1938	5,251,283	13,698,470
1939	5,519,208	14,415,281
1940	6,203,839	16,377,959
1941	6,969,962	19,382,471
1942	7,754,053	22,624,410
1943	7,676,726	24,030,686
1944	7,428,708	26,814,957
1945	7,800,151	27,751,377
1946	8,826,311	33,441,930
Total	220,503,250	689,620,174

NOTE: Production quantities and values prior to 1919 refer to sales and colliery consumption. From 1919 to 1946 the mine output figures are given.

THE MINES BRANCH

ANNUAL CONSUMPTION OF COAL IN CANADA, 1902-1946

The following revised table is taken from the report issued by the Dominion Bureau of Statistics for the year 1946:

Year	Canadian*		Imported coal "Entered for consumption"				Total	Per Capita		
			From U.S.A.		From Great Britain					
	Short tons	%	Short tons	%	Short tons	%	Short tons			
1902	5,376,413	53.1	4,656,286		101,726		4,734,559	46.9	10,110,972	1.840
1903	6,005,735	47.3	6,520,931		184,593		6,678,450	52.7	12,684,185	2.245
1904	6,697,183	47.9	7,238,869		85,687		7,297,482	52.1	13,994,665	2.402
1905	7,032,661	48.4	7,233,738		68,500		7,215,446	50.6	14,249,107	2.374
1906	7,927,560	50.5	7,787,338		67,014		7,758,325	49.5	15,685,885	2.573
1907	8,617,352	45.0	10,368,697		54,325		10,549,503	55.0	19,166,855	2.990
1908	8,156,478	47.3	10,203,355		97,514		10,195,424	52.7	19,351,902	2.921
1909	8,913,376	47.9	9,805,253		67,671		9,711,826	52.1	18,625,202	2.739
1910	10,532,103	50.2	10,545,451		51,541		10,437,123	49.8	20,970,226	3.001
1911	9,822,749	40.5	14,510,129		48,963		14,434,949	59.5	24,247,698	3.364
1912	12,385,696	46.0	14,557,124		38,668		14,549,104	54.0	26,934,800	3.645
1913	13,450,158	42.6	18,145,769		37,825		18,132,387	57.4	31,582,545	4.138
1914	12,214,403	45.5	14,687,853		33,101		14,637,920	54.5	26,852,323	3.408
1915	11,500,480	48.1	12,450,796		15,098		12,406,212	51.9	23,906,692	2.995
1916	12,348,036	41.3	17,576,202		4,401		17,517,820	58.7	29,865,856	3.733
1917	12,313,603	37.2	20,848,009		9,451		20,810,132	62.8	33,123,735	4.110
1918	13,160,731	37.8	21,674,826		3,761		21,611,101	62.2	34,771,832	4.268
1919	11,611,168	40.3	17,292,913		344		17,236,269	59.7	28,847,437	3.471
1920	14,025,566	42.9	18,752,981				18,868,741	67.1	32,694,307	3.821
1921	12,715,734	41.1	18,300,081		1,591		18,258,387	58.9	30,974,121	3.525
1922	13,044,352	50.2	12,255,555		765,980		12,962,189	49.8	26,006,541	2.916
1923	15,070,962	41.8	20,417,239		572,570		20,967,971	58.2	36,038,933	4.000
1924	12,529,358	42.8	16,405,344		317,112		16,714,143	57.2	29,243,501	3.198
1925	12,125,290	42.6	15,744,957		604,117		16,331,971	57.4	28,457,261	3.062
1926	15,086,296	47.7	16,204,405		287,299		16,565,555	52.3	31,651,851	3.349
1927	15,944,983	46.7	17,266,434		907,220		18,177,303	53.3	34,122,286	3.541
1928	16,487,807	50.0	15,830,688		682,755		16,515,582	50.0	33,003,389	3.356
1929	16,387,461	48.0	16,780,452		843,502		17,724,132	52.0	34,111,593	3.401
1930	14,082,671	43.3	16,971,933		1,144,861		18,412,039	56.7	32,464,710	3.180
1931	11,682,779	47.7	11,793,798		987,442		12,828,327	52.3	24,511,106	2.362
1932	11,212,701	49.0	9,889,866		1,727,716		11,654,492	51.0	22,867,193	2.177
1933	11,456,273	51.5	8,865,935		1,942,875		10,808,962	48.5	22,265,235	2.085
1934	13,236,406	51.1	10,580,710		1,981,116		12,651,168	48.9	25,887,574	2.392
1935	13,306,303	53.1	9,618,518		1,822,500		11,735,835	46.9	25,042,138	2.290
1936	14,508,642	53.3	10,801,643		1,498,656		12,719,515	46.7	27,228,167	2.469
1937	15,172,729	53.5	12,374,574		1,211,052		14,268,585	48.5	29,441,314	2.648

1938	13,800,094	53.5	10,754,747	1,257,887	12,012,634	46.5	25,812,728	2,281
1939	14,902,915	50.7	12,838,347	1,099,419	14,479,668	49.3	29,382,583	2,597
1940	16,666,234	49.5	15,509,778	1,314,438	17,036,090	50.5	33,702,324	2,960
1941	17,297,151	46.2	19,332,479	693,902	20,026,082	53.8	37,253,233	3,238
1942	17,725,761	42.4	23,735,354	338,010	24,122,916	57.6	41,848,677	3,591
1943	16,321,006	37.1	27,303,778	391,475	27,895,098	62.9	44,016,104	3,727
1944	15,660,808	35.7	27,948,008	218,511	28,166,201	64.3	43,827,009	3,659
1945	15,227,819	38.3	24,505,241	28,388	24,521,528	61.7	39,749,347	3,279
1946	16,502,508	39.0	25,639,541	101,580	25,740,704	61.0	42,243,212	3,434

*The sum of Canadian coal-mine sales, colliery consumption, coal supplied to employees, and coal used in making coke, etc., less the tonnage of coal exported.

†Includes small tonnages from countries other than Great Britain and the United States. Deductions have been made to take account of foreign coal re-exported from Canada and bituminous coal ex-warehoused for ships' stores.

THE MINES BRANCH

The following table shows the quantity of coke imported into Canada during the year 1945, 1946 and 1947, through ports in the Provinces, compiled from information from the Dominion Bureau of Statistics:

Ports in Province of	1945		1946		1947	
	Made from Petroleum	Made from Coal	Made from Petroleum	Made from Coal	Made from Petroleum	Made from Coal
Nova Scotia		195		135		13,405
Quebec	109638	210,778	161,660	25,301	194,222	18,057
Ontario	82,691	1,008,738	60,295	863,467	61,557	500,272
Manitoba		27,941		17,823		27,821
Saskatchewan						
British Columbia	1	2,896	68	2,282	3,734	2,923
Alberta						
Prince Edward Island						502
Total	192,330	1,250,548	222,023	909,111	259,613	563,305

Imports of Coal for each year since 1919, through ports in the Provinces of Ontario, Manitoba, Saskatchewan, Alberta, British Columbia and Yukon.

Year	BITUMINOUS COAL									
	Central Ontario	Port Arthur	Fort Frances	Fort William	Total Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia & Yukon	Total Canada
1919	7,641,682	483,991	59,253	1,063,793	9,248,719	62,746	1,406	1,131	6,700	12,010,490
1920	10,261,237	571,879	111,957	1,391,709	12,338,903	43,547	535	607	13,128	15,902,632
1921	8,605,872	659,763	127,956	1,316,155	10,709,746	76,833	1,127	1,820	17,081	13,536,250
1922	7,424,171	445,019	98,082	1,517,250	9,485,522	74,848	1,484	1,147	13,966	11,563,467
1923	11,621,859	619,037	95,439	1,731,667	14,068,002	112,134	1,607	1,110	17,919	17,517,108
1924	8,763,676	403,388	70,259	1,500,525	10,737,848	143,607	2,422	1,209	25,049	12,619,082
1925	9,100,462	286,984	81,173	497,264	9,884,710	147,758	1,732	1,175	40,286	13,015,323
1926	10,531,095	199,908	83,182	965,105	11,696,109	149,374	1,887	1,515	32,992	13,802,242
1927	11,572,678	221,694	90,884	1,273,691	13,158,927	142,860	2,141	1,324	22,648	15,178,640
1928	10,539,408	194,718	103,594	1,481,228	12,318,948	97,002	2,536	1,360	18,682	13,966,183
1929	11,232,027	143,889	100,141	1,591,656	13,067,713	38,801	2,477	1,327	18,526	14,585,275
1930	10,421,748	165,499	70,403	1,297,939	11,955,589	24,898	1,816	1,351	8,886	13,345,308
1931	8,553,736	86,810	65,738	609,279	9,315,563	7,041	1,535	912	2,308	10,347,280
1932	6,867,307	62,019	48,195	691,831	7,670,072	12,298	1,459	830	3,582	8,532,318
1933	7,038,386	74,934	30,108	482,206	7,625,634	12,213	1,327	998	26,077	8,427,656
1934	8,472,143	126,671	37,085	602,510	9,238,409	12,103	1,235	1,302	2,301	10,268,945
1935	8,032,739	6,033	53,145	591,810	8,683,727	9,918	952	1,136	3,722(a)	9,549,457(b)
1936	9,448,795	156,229	67,784	688,950	9,361,758	14,101	847	1,203	3,524(d)	10,200,253(e)
1937	9,946,567	128,555	69,598	820,160	10,964,920	12,079	743	1,293	2,540(f)	12,241,270(h)
1938	7,981,712	113,746	56,806	698,371	8,850,635	9,061	783	1,116	2,701(g)	9,567,334(i)
1939	8,035,174	77,532	53,772	528,887	8,695,362	15,035	862	990	1,808(h)	9,903,613(o)
1940	11,312,806	28,363	30,138	503,732	11,875,089	7,066	692	795	2,591	13,578,705(x)
1941	13,910,140	29,608	26,523	765,376	14,731,647	10,021	671	1,062	1,646	17,867,068
1942	14,397,298	92,783	5,942	1,212,815	15,954,838	21,568	773	789	1,573	20,807,008
1943	15,524,762	152,955	262,893	2,435,150	18,385,769	96,293	732	1,092	1,511	24,393,798
1944	14,854,562	271,617	200,854	2,195,070	17,481,523	16,255	555	1,236	1,611	24,513,527
1945	14,236,472	262,266	200,856	1,390,728	16,110,322	20,497	642	1,221	1,682	21,176,811(xx)
1946	14,272,178	331,674	322,295	1,946,218	16,872,365	16,265	686	1,038	1,790	22,000,398xxx
1947	16,827,356	340,450	336,647	1,972,434	19,536,887	26,146	560	806	1,866	25,841,440xxxx

xConsists of 13,382,389 tons from the United States and 196,316 tons from Great Britain.

xxConsists of 21,176,805 tons from the United States and 6 tons from Great Britain.

xxxConsists of 22,000,314 tons imported from the United States and 84 tons from Great Britain.

xxxxConsists of 25,839,917 tons imported from the United States, 1,087 tons imported from Great Britain, 431 tons from Belgium and 5 tons from Alaska.

ANTHRACITE COAL

Year	Central Ontario	Port Arthur	Fort Frances	Fort William	Total Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia & Yukon	Total Canada
1919	2,977,913	119,234	559	346,442	3,444,148	12,906	.....	66	136	4,972,283
1920	2,943,134	69,206	2,648	226,476	3,221,464	17,509	206	517	75	4,912,964
1921	2,809,189	62,782	138	198,108	3,070,217	33,473	254	66	251	4,567,370
1922	1,586,924	21,507	432	36,018	1,644,461	14,715	231	.....	1,261	2,693,957
1923	3,061,779	23,729	439	84,323	3,144,766	55,856	231	.....	1,174	5,187,881
1924	2,589,566	4,715	237	84,323	2,689,093	24,222	1,720	.....	687	4,193,594
1925	2,203,281	37	170	60,731	2,254,049	21,306	702	30	246	2,798,744
1926	2,458,674	.....	56	60,810	2,519,494	17,990	484	.....	5,202	4,042,932
1927	2,123,515	.....	51	59,283	2,202,849	15,885	484	.....	2,812	4,083,619
1928	2,179,022	.....	42	57,494	2,236,567	10,130	579	.....	2,941	3,737,333
1929	2,246,063	352	303	52,369	2,258,057	8,190	365	.....	597	4,019,917
1930	2,080,457	.....	224	45,241	2,125,922	3,323	367	.....	1,123	4,256,090
1931	1,615,643	.....	.....	18,302	1,633,943	3,693	.....	.....	733	3,178,151
1932	1,250,755	.....	3	12,677	1,263,435	3,800	.....	3	702	3,138,157
1933	1,129,041	.....	8	8,742	1,137,791	5,669	57	75	3,687	3,035,613
1934	1,374,881	.....	3,030	7,934	1,385,845	6,086	.....	.....	1,282	3,537,309
1935	1,370,119	.....	19	9,455	1,379,583	5,852	49	.....	1,600	3,451,318(e)
1936	1,436,613	.....	135	16,350	1,453,098	5,864	58	.....	1,151	3,530,040(f)
1937	1,608,653	.....	8	21,052	1,629,713	5,639	66	34	61	3,572,288(j)
1938	1,697,601	.....	69	16,050	1,713,720	4,674	39	.....	280	3,714,001(m)
1939	2,043,142	.....	297	18,459	2,061,898	4,696	.....	33	.....	3,977,805(p)
1940	2,033,585	.....	.....	.....	2,044,156	4,466	34	.....	236	3,964,862(q)
1941	2,343,406	.....	.....	.....	2,362,433	10,021	.....	16	.....	3,940,859
1942	2,807,479	.....	.....	.....	2,816,165	7,093	.....	23	.....	4,802,023
1943	2,502,024	.....	.....	.....	2,513,199	16,336	.....	7	110	4,458,519
1944	2,528,190	.....	.....	.....	2,535,976	9,723	.....	4	62	4,413,227
1945	2,008,208	.....	42	2,932	2,010,182	6,198	1	1	62	3,411,424x
1946	2,776,497	1,977	513	13,394	2,792,381	11,718	.....	.....	.....	4,639,347xx
1947	2,912,629	1,831	126	9,825	2,924,411	10,797	.....	11	51	4,464,007xxx

xConsists of 3,383,042 tons imported from the United States and 28,382 from Great Britain.

xxConsists of 4,537,852 tons imported from the United States and 101,496 from Great Britain.

xxxConsists of 4,412,285 tons imported from the United States and 51,722 from Great Britain.

(a) Includes imports into the Yukon Territory of 10 tons in July and 10 tons in October.

(b) Consists of 9,168,428 tons imported from the United States, 380,645 tons imported from Great Britain, 43 tons imported from Alaska, 285 tons imported from Norway, 55 tons imported from Estonia and 1 ton imported from Poland.

(c) Consists of 1,670,085 tons imported from the United States, 1,454,521 tons imported from Great Britain, 205,045 tons imported from Germany, 67,220 tons imported from Belgium and 54,447 tons imported from French Indo-China.

- (d) Includes imports into the Yukon Territory of 4 tons in April, 3 tons in May, 6 tons in June, 45 tons in July and 2 tons in October.
- (e) Consists of 10,042,127 tons imported from the United States, 149,905 tons imported from Great Britain, 9,421 tons imported from Germany, 361 tons imported from Norway, 124 tons imported from Denmark, 45 tons imported from Sweden, 35 tons imported from the Netherlands, 134 tons imported from Estonia, and 286 tons imported from Newfoundland.
- (f) Consists of 1,685,848 tons imported from the United States, 1,331,279 tons imported from Great Britain, 359,994 tons imported from Germany, 33,543 tons imported from Belgium, 122,572 tons imported from French Indo-China, 16,231 tons imported from the Netherlands, and 1,120 tons imported from China.
- (g) Includes imports into the Yukon Territory of 4 tons in March, 6 tons in June, 45 tons in July and 2 tons in October.
- (h) Consists of 12,333,378 tons imported from the United States, 56,073 tons from Great Britain, 54,061 tons from Germany, 113 tons from Norway, and 200 tons from Estonia.
- (i) Consists of 2,003,317 tons imported from the United States, 1,134,855 tons imported from Great Britain, 258,257 tons from Germany, 8,131 tons imported from Belgium, 154,495 tons imported from Russia, 78 tons imported from Morocco.
- (k) Includes imports into the Yukon Territory of 8 tons in March, 10 tons in July and 8 tons in October.
- (l) Consists of 9,644,020 tons imported from the United States, 65,957 tons from Great Britain, 34,258 tons from Germany, and 417 tons from Japan.
- (m) Consists of 1,973,610 tons from the United States, 1,199,131 tons from Great Britain, 407,031 tons from Germany, 34,182 tons from Belgium, 14,952 tons from Russia, 19,645 tons from Morocco, 37,594 tons from the Netherlands, and 30,302 tons from French Indo-China.
- (n) Includes imports into the Yukon Territory of 15 tons in July and 8 tons in December.
- (o) Consists of 9,836,110 tons imported from the United States, 67,483 tons from Great Britain, and 20 tons from Norway.
- (p) Consists of 2,605,765 tons from the United States, 1,034,901 tons from Great Britain, 293,602 tons from Germany, and 43,537 tons from French Indo-China.
- (q) Consists of 2,643,588 tons from the United States, and 1,321,274 tons from Great Britain.

THE MINES BRANCH

MINERAL PRODUCTION IN ALBERTA DURING 1945 AND 1946

Prepared in the Mining, Metallurgical and Chemical Branch, Ottawa, Canada

	1945		1946	
	Quantity	Value	Quantity	Value
METALLICS:				
Gold, fine ounces	7	269	110	4,042
Silver, fine ounces	1		12	10
NON-METALLICS:				
Coal, short tons	7,800,151	27,751,377	8,826,311	33,441,930
Natural gas, M.cu.ft.	40,393,061	7,095,910	40,097,096	7,184,006
Peat moss, tons				
Petroleum, crude, barrels	7,979,786	13,169,692	7,137,921	14,347,933
Salt, tons	29,421	430,048	31,769	441,835
Sodium, sulphate, tons				
CLAY PRODUCTS AND OTHER				
STRUCTURAL MATERIALS:				
Cement, barrels	620,337	1,246,346	809,721	1,635,222
Clay products, barrels		1,401,875		1,808,971
Lime:				
Quicklime, tons	19,240	163,172	23,785	204,926
Hydrated, tons	615	6,150		
Sand and gravel, tons	919,736	433,436	1,812,468	1,060,703
Stone, tons	13,528	54,962	13,417	55,286
Total		51,753,237		60,184,864

PARTICULARS WITH REFERENCE TO THE COAL MINING INDUSTRY IN THE PROVINCE OF ALBERTA DURING THE YEAR ENDING DECEMBER 31, 1947

SUMMARY OF STATISTICS

Tonnage stripped by farmers under domestic permits	30
Number of short tons of coal produced	8,074,596
Number of short tons of shale produced	94,396
Number of coal mines in operation during the year	191
Number of mines opened during the year	12
Number of mines re-opened during the year	30
Number of mines closed during the year	30
Number of mines abandoned during the year	6
Number of shale pits in operation during the year	5
Number of mines in operation at December 31st, 1947	167
61 mines or 31.94% of the total operating produced	0.32% of the output.
46 mines or 24.08% of the total operating produced	1.30% of the output.
17 mines or 8.90% of the total operating produced	1.44% of the output.
28 mines or 14.66% of the total operating produced	8.81% of the output.
12 mines or 6.28% of the total operating produced	11.33% of the output.
7 mines or 3.67% of the total operating produced	10.08% of the output.
6 mines or 3.14% of the total operating produced	13.05% of the output.
9 mines or 4.71% of the total operating produced	26.97% of the output.
5 mines or 2.62% of the total operating produced	26.70% of the output.
Average number of persons employed below ground	5,831
Average number of persons employed above ground	2,930
Number of separate accidents causing loss of life	15
Number of deaths caused by accidents above ground	6
Number of deaths caused by accidents below ground	9
Number of serious accidents above ground	21
Number of serious accidents below ground	100
Number of slight accidents above ground	21
Number of slight accidents below ground	96
Total purchased electric power (kilowatt hours)	47,892,597
Number of prosecutions instituted	18
Number of Provisional Overmen's Certificate issued during 1947	89
Number of Provisional Examiner's Certificates issued during 1947	51
Number of Provisional Electrician's Certificates issued during 1947	4
Number of Provisional Miner's Certificates issued during 1947	228
Number of Miner's Permits issued during 1947	586
Number of Miner's Certificates issued during 1947	416
Number of First Class Certificates issued during 1947	4
Number of Second Class Certificates issued during 1947	15
Number of Third Class Certificates issued during 1947	31
Number of Mine Surveyor's Certificates issued during 1947	4
Number of Mine Electrician's Certificates issued during 1947	8
Number of First Class Certificates issued to December 31, 1947	287
Number of Second Class Certificates issued to December 31, 1947	574
Number of Third Class Certificates issued to December 31, 1947	1,686
Number of Mine Surveyor's Certificate issued to December 31, 1947	209
Number of Mine Electrician's Certificates issued to December 31, 1947	139
Number of Miner's Certificates issued to December 31, 1947	18,581

**PARTICULARS OF WORK DONE BY FARMERS STRIPPING COAL UNDER
DOMESTIC PERMIT**

Tonnage	30
Number of days worked during the year	14
Number of men employed during the year	4
Number of shifts worked	11
Total number of permits issued	4
Permits issued in 1946 and used in 1947	

The above coal was stripped for domestic use only, and not for sale.

PARTICULARS OF WORK DONE IN SHALE MINES IN PROVINCE DURING 1947

Output of shale (in tons) used making bricks	73,760
Output of shale (in tons) used making hollow tile	20,636
Number of shifts worked	52,368
Average number of men employed	215
Explosives used (pounds)	13,845
Number of shots fired	2,637
Total number of bricks made	26,205,618
Total number of bricks put to stock	2,070,297
Total number of bricks lifted from stock	104,506
Bricks sold for use in:	
Alberta	12,274,843
British Columbia	2,238,360
Saskatchewan	7,136,232
Manitoba	2,306,088
Ontario	284,304
Total	24,239,827
Hollow tile made (tons)	23,778
Hollow tile put to stock	3,338
Hollow tile sold	20,440

In the following tables the short ton of 2,000 lbs. is used in all cases.

Year	Output in tons for N.W.T. (Alta. & Sask.)	Output in tons for Alberta
1901	346,649	
1902	510,674	
1903	622,939	
1904	782,931	
1905		811,228
1906		1,385,000
1907		1,834,745
1908		1,845,000
1909		2,174,329
1910		3,036,757
1911		1,694,564
1912		3,446,349
1913		4,306,346
1914		3,821,739
1915		3,434,891
1916		4,635,604
1917		4,863,414
1918		6,148,620
1919		5,022,412
1920		6,908,923
1921		5,937,195
1922		5,976,432
1923		6,866,923
1924		5,203,713
1925		5,883,394
1926		6,508,908
1927		6,936,780
1928		7,334,179
1929		7,147,250
1930		5,755,911
1931		4,564,290
1932		4,870,030
1933		4,714,784
1934		4,748,848
1935		5,462,973
1936		5,696,375
1937		5,551,682
1938		5,230,015
1939		5,518,105
1940		6,205,088
1941		6,970,064
1942		7,754,279
1943		7,677,982
1944		7,427,433
1945		7,801,248
1946		8,824,455
1947		8,074,596

THE MINES BRANCH

CLASSIFICATION OF OUTPUT DURING THE YEARS 1901 TO 1947 (INCLUSIVE)

Year	Domestic	Domestic and Bituminous	Sub-bituminous	Bituminous	Anthracite	Coal used in Coke production	Briquettes	Coke
1901	.....	331,907	.....	.....	14,742	.....	.....	.....
1902	.....	494,087	.....	.....	16,587	.....	.....	.....
1903	.....	617,734	.....	.....	3,185	.....	.....	.....
1904	.....	739,568	.....	.....	23,363	.....	.....	.....
1905	.....	972,686	.....	.....	43,653	.....	.....	.....
1906	.....	.....	.....	546,623	235,597	71,292	.....	46,640
1907	602,780	.....	.....	939,295	256,115	103,930	49,585	69,844
1908	639,335	.....	.....	1,001,571	249,095	112,887	36,261	73,762
1909	584,334	.....	.....	1,197,399	213,257	128,397	89,785	75,657
1910	763,673	.....	.....	1,896,961	261,785	148,104	108,996	87,812
1911	878,011	.....	.....	649,745	80,119	196,349	48,200	121,578
1912	964,700	.....	.....	1,926,371	178,589	170,818	90,000	35,984
1913	1,341,389	.....	.....	2,374,401	168,720	104,012	130,861	105,684
1914	1,763,225	.....	.....	1,953,367	170,971	44,249	109,082	65,167
1915	1,682,922	.....	.....	1,626,237	125,732	38,878	83,180	29,058
1916	2,172,801	.....	.....	2,335,259	140,544	67,105	107,959	23,826
1917	2,537,829	.....	.....	2,206,868	118,717	51,905	93,818	41,950
1918	3,035,061	.....	.....	2,982,334	131,225	53,462	100,470	31,630
1919	3,611,009	.....	.....	2,325,787	85,616	.....	70,033	32,858
1920	3,359,309	.....	.....	3,419,021	130,594	.....	101,693	.....
1921	2,943,141	.....	.....	2,897,380	96,674	.....	62,466	.....
1922	3,086,669	.....	.....	2,214,273	40,417	.....	33,663	.....
1923	3,161,741	.....	635,073	3,245,313	107	.....	39,638	.....
1924	3,096,660	.....	585,765	1,521,288	.....	.....	791	.....
1925	3,156,359	.....	581,835	2,145,200	.....	.....	11,381	.....
1926	3,160,029	.....	580,371	2,858,508	.....	287	20,649	173
1927	3,357,171	.....	595,190	2,984,419	.....	.....	24,768	.....
1928	3,378,200	.....	740,498	3,215,481	.....	.....	28,167	.....
1929	3,385,749	.....	668,108	3,093,393	.....	.....	24,111	.....
1930	2,874,090	.....	603,331	2,278,490	.....	.....	15,102	.....
1931	2,246,544	.....	471,389	1,846,357	.....	.....	13,582	2,183
1932	2,576,831	.....	559,479	1,733,720	.....	4,591	14,935	49,279
1933	2,434,047	.....	554,141	1,726,596	.....	75,275	15,906	59,703
1934	2,295,566	.....	537,542	1,915,740	.....	91,745	18,812	63,498
1935	2,647,912	.....	568,435	2,248,625	.....	98,233	21,015	63,349
1936	2,841,231	.....	566,486	2,299,858	.....	97,353	27,044	63,967
1937	2,631,150	.....	508,529	2,410,093	.....	99,537	39,239	68,692
1938	2,453,263	.....	489,912	2,287,850	.....	103,498	48,510	68,913
1939	2,449,199	.....	513,105	2,536,801	.....	103,191	66,127	70,753
1940	2,537,205	.....	598,686	3,069,137	.....	105,926	.....	.....

1941	2,713,254	585,453	3,671,357	.....	105,390	126,188	70,354
1942	3,213,113	733,547	3,807,619	.....	107,410	197,905	71,372
1943	3,416,037	791,952	3,469,993	.....	101,152	222,106	67,348
1944	3,146,801	729,427	3,551,205	.....	101,633	253,552	67,821
1945	.....	3,290,485	4,690,763	.....	64,280	259,274	43,180
1946	.....	3,434,859	5,389,596	.....	64,978	273,646	43,206
1947	.....	3,237,220	4,837,376	.....	81,128	282,898	52,627

1901 to 1905 includes output from Alberta and Saskatchewan. Previous to 1922 sub-bituminous coal was included in bituminous coal.

During the year 1909 a strike affecting all the larger mines in the Province, lasted for a period of three months.

During the year 1911 a strike affecting all the larger mines in the Province, lasted for a period of eight months.

During the year 1917 a strike affecting all the larger mines in the Province, lasted for a period of three months.

During the year 1919 a strike affecting all the larger mines in the Province, lasted for a period of three months.

During the year 1922 a strike affecting all the larger mines in the Province, lasted for a period of five months.

During the year 1924 a strike affecting all the larger mines in the Province, lasted for a period of six and one-half months.

THE MINES BRANCH

Total Output of COAL disposed of during 1947:

Sold for Consumption in:																			
	Alberta	Saskatchewan	British Columbia	Manitoba	Ontario	China	Ship's Bunkers	Sold to		Total Sales	Used under Colliery Boilers	Used by R.R.	Used making Briquettes	Used making Coke	Put to Stock	Put to Waste	Lifted from Stock	Lifted from Waste	Total Output
								United States	Railroad Companies										
Bituminous ..	418,686	230,085	637,121	255,513	49,545	42,192	41.07	89,080	2,504,604	4,230,933	154,987	1,928	266,178	81,128	47,159	115,207	39,277	20,867	4,837,376
Sub-Bituminous	1,252,444	1,244,921	262,282	327,901	113,353	...	...	2,155	...	3,203,056	18,588	...	...	...	1,461	17,569	638	2,816	3,237,220
Total	1,671,130	1,475,006	899,403	583,414	162,898	*42,192	41.07	91,235	2,504,604	7,433,989	173,575	1,928	566,178	81,128	48,620	132,776	39,915	23,683	8,074,596
Briquettes	30,137	31,701	32,431	59,135	45,209	...	...	41	84,244	282,898	...	...	...	...	...	...	...	...	282,898
Coke	88	50	52,439	...	...	...	...	50	...	52,627	...	...	...	...	...	...	...	...	52,627

*China includes 14,461 tons to Japan.

How the total output of BITUMINOUS COAL from the Province was disposed of by Areas during 1947:

Areas	Sold for Consumption in:										Total Sales	Used under Boilers	Used by R.R.	Making Briquettes	Making Coke	Put to Stock	Put to Waste	Lifted from Stock	Lifted from Waste	Total Output
	Alberta	Saskatchewan	British Columbia	Manitoba	Ontario	China	Ship's Bunkers	United States	Sold to Railroad Companies											
Group 1:																				
Cascade	12,748	3,244	10,005	6,640	616				141,521	174,774	20,995	499		84,127		3,916	365	3,907		280,769
Nordeg	513								152,563	153,076	8,454			182,051		2,367		2,228		343,720
Group 2:																				
Crownest	81,695	26,294	179,514	86,453	7,603	22,777		77,696	1,308,895	1,790,927	17,605	105			81,128	28,159	94,612	23,789	20,867	1,967,880
Mountain Park	52,776	1,761	102,635	61,203	9,298	19,415	4,107	174	652,192	903,561	51,386									954,949
Group 3:																				
Coalspur	26,502	25,341	294,125	55,675	28,304			6,220	248,388	684,555	46,554	1,159				4,078	19,870	1,441		754,775
Halcourt	983							4,990		983	31						3			1,017
Lethbridge	228,922	146,238	49,446	27,125	1,969				596	459,286	2,334	165				100	211	7,817		462,322
Morley	1,189								449	1,638										1,738
Pekisko	3,389									3,389										3,389
Pincher	305									305										681
Prairie Creek	506		78							584						230	146	95		655
Saunders	9,019	27,207	1,318	18,417	1,755					57,716	7,626					166				65,342
No Area	139									139										139
Total	418,686	230,085	637,121	255,513	49,545	*42,192	4,107	89,080	2,504,604	4,230,933	154,987	1,928		266,178	81,128	47,159	115,207	39,277	20,867	4,837,376

*China includes 14,461 tons to Japan.

THE MINES BRANCH

How the total output of SUB-BITUMINOUS COAL from the Province was disposed of by Areas during 1947:

Areas	Sold for Consumption in:							Used under Colliery Boilers	Used by R.R. Colliery	Used making Brickettes	Used making Coke	Put to Stock	Put to Waste	Lifted from Stock	Lifted from Waste	Total Output
	Alberta	Saskat- chewan	British Columbia	Manitoba	Ontario	China	Ships Bunkers	United States	Sold to Railroad Companies							
Group 4:	15,313	1,424	2,376	143	94								55			15,368
Ardley	9,918											275				14,230
Big Valley	24,869	47,876	17,308	26,230	18,360											134,643
Brooks	44,903	11,583	6,820	3,418	596								1,706			70,159
Carbon	47,634											594	662			8,296
Champion	465,106	1,026,500	180,643	260,932	51,186			830				10	1,034	308	2,150	1,857,416
Drumheller	465,106	3,752	11,940	3,338	4,523									124		493,133
Edmonton	14,940															14,940
Gleichen	1,605											33	616			1,605
Milk River	72,701	4,673	8,074	1,929	3,963								6,690			95,468
Pembina	26,233	32,390	26,985	20,397	14,356			1,325								128,376
Taber	1,385															1,385
Wetaskiwin	231															231
Whitecourt																
Group 5:	53,930	12,299	2,498	429	13,949							389	597	131	360	83,512
Camrose	53,333	11,516	990	1,961	819								3,170		264	72,058
Castor	16															16
Pakowki	6,226	2,377														8,603
Redcliff	5,673												75			5,748
Rochester	27,950	23,950										85	2,291			54,194
Sheerness	90,415	66,581	4,648	9,124	5,507							75	104	75	42	177,120
Tofield	657															657
Westlock																
Total	1,252,444	1,244,921	262,282	327,901	113,353			2,155				1,461	17,569	638	2,816	3,237,220

How the total output of COAL from the Province was disposed of by months during 1947:

Months	Sold for Consumption in:							Ship's Bunkers	United States	Sold to Railroad Companies	Total Sales	Used under Colliery Boilers	Used by R.R.	Used making Brickettes	Used making Coke	Put to Stock	Put to Waste	Lifted from Stock	Lifted from Waste	Total Output
	Alberta	Saskatchewan	British Columbia	Manitoba	Ontario	China														
January	193,364	164,121	107,505	69,097	22,276		3,164	12,962	181,101	753,890	16,377	107	19,736	6,960	2,871	14,343	2,902	1,334		810,048
February	165,362	128,924	78,835	41,582	8,025		943	6,423	119,753	549,847	14,719	770	15,346	6,231	8,833	6,681	2,879	147		599,401
March	141,576	144,871	88,035	53,940	10,347			11,909	190,993	641,671	16,050	101	16,904	6,706	4,901	10,766	3,058	281		693,760
April	96,920	107,908	82,171	45,521	10,332			7,881	218,266	568,999	14,306	107	20,507	6,902	1,426	11,774	8,384	1,160		614,477
May	91,101	106,285	67,772	38,947	7,560			3,910	256,534	572,109	13,306	115	22,426	6,746	1,190	10,037	4,255	3,320		618,354
June	75,787	108,107	71,254	39,002	6,329			2,734	235,905	539,118	13,140	103	22,875	6,367	3,710	9,902	1,180	2,465		591,570
July	76,077	59,682	45,560	26,156	6,069	23,242		4,651	229,062	470,509	12,309	51	22,288	7,249	2,233	8,530	3,016	3,650		516,503
August	101,422	108,281	61,278	45,422	10,996	382		5,583	233,280	566,614	14,297	87	24,137	6,378	1,074	8,620	3,774	2,900		614,533
September	147,998	111,909	64,096	44,866	14,849			8,766	229,244	618,728	13,657	113	22,700	6,076	5,454	10,413	1,124	3,571		672,446
October	174,274	136,829	69,586	58,243	20,800			8,451	197,860	666,063	14,886	112	25,224	7,793	4,045	13,619	2,023	3,439		726,280
November	214,700	135,689	77,561	57,404	21,167	4,107		6,839	209,313	728,880	15,049	123	26,228	6,985	2,102	17,026	5,357	1,037		787,999
December	192,249	162,400	85,750	63,234	24,148	14,461		14,046	203,273	759,361	15,479	139	27,807	6,735	10,781	11,065	1,963	379		829,225
Total	1,671,130	1,475,006	899,403	583,414	162,898	*42,192	4,107	91,235	2,504,604	7,433,989	173,575	1,928	266,178	81,128	48,620	132,776	39,915	23,683		8,074,596
% of Total Sales	22.48	19.84	12.10	7.85	2.19	.57	.05	1.23	33.69											

*China includes 14,461 tons to Japan.

How the total output of SUB-BITUMINOUS COAL was disposed of by months during 1947:

Months	Sold for Consumption in						Total Sales	Used under Colliery Boilers	Used by R.R.	Put to Stock	Put to Waste	Lifted from Stock	Lifted from Waste	Total Output
	Alberta	Saskat- chewan	British Columbia	Manitoba	Ontario	United States								
January	154,834	139,373	40,265	40,497	15,731	1,247	391,947	2,129		50	5,271		1,334	398,063
February	127,945	107,342	21,646	23,881	3,377	87	284,278	2,037		100	1,429		147	287,697
March	107,398	121,517	25,236	30,378	3,858	87	290,474	1,893		148	1,343		281	293,577
April	72,459	89,961	22,227	25,770	5,607	130	216,154	1,515		40	676	214		218,171
May	67,184	90,826	16,354	22,115	4,797	130	201,276	1,312		15	133		360	202,376
June	48,801	93,025	17,065	23,233	4,369	42	186,535	1,177			115			187,827
July	44,111	48,178	9,698	12,418	3,087	136	117,628	1,001			128			118,757
August	74,146	92,173	16,684	27,739	7,828		214,570	1,274		158	268			216,270
September	93,388	84,160	16,761	24,630	11,072	80	240,091	1,370		388	958		131	242,676
October	128,627	115,771	21,590	32,403	15,855		314,156	1,822		113	1,097	49	94	316,745
November	176,733	113,689	23,397	31,948	18,340	259	362,366	1,634		122	4,291	228	227	367,968
December	156,818	138,906	31,449	36,889	19,432	87	383,581	1,724		327	1,860	147	242	387,103
Total	1,252,444	1,244,921	262,282	327,901	113,353	2,155	3,203,056	18,588		1,461	17,569	638	2,816	3,237,220
% of Total Sales	39.10	38.87	8.19	10.23	3.54	.07								

THE MINES BRANCH

Amount of COAL sold during the years 1915 to 1947 (inclusive) for consumption in:

Year	Alberta	British Columbia	Saskatchewan	Manitoba	Ontario	North-West Territories	Quebec	United States	To Railroads	Alaska	Total
1915	2,129,130	54,868	695,898	64,816	.....	.....	.....	25,047	.....	.....	2,969,751
1916	2,866,670	86,413	1,007,765	97,265	.....	.....	.....	61,092	.....	.....	4,119,205
1917	2,813,413	76,397	1,139,771	249,872	.....	.....	.....	93,081	.....	.....	4,372,534
1918	3,440,154	101,189	1,372,439	511,168	629	.....	.....	133,276	.....	.....	5,558,855
1919	2,991,110	95,461	1,115,329	314,290	308	.....	.....	121,212	.....	.....	4,637,710
1920	1,647,202	128,850	1,310,146	600,962	13,911	.....	.....	152,610	2,516,555	.....	6,371,266
1921	1,415,861	116,089	1,294,441	495,388	9,898	.....	30	133,823	2,023,204	.....	5,488,704
1922	1,443,942	107,920	1,371,249	520,518	21,573	.....	.....	105,514	2,076,291	.....	5,647,109
1923	1,382,788	108,326	1,293,454	553,649	52,234	.....	102	83,557	3,110,171	.....	6,514,219
1924	1,431,327	114,186	1,169,788	510,667	16,525	.....	.....	39,142	1,613,574	.....	4,914,649
1925	1,440,032	117,037	1,287,783	509,655	28,531	.....	.....	49,507	2,139,716	.....	5,573,431
1926	1,325,290	127,858	1,296,181	591,267	74,539	.....	221	48,216	2,706,449	.....	6,170,032
1927	1,308,039	187,028	1,427,904	612,542	22,680	.....	.....	45,160	2,739,765	.....	6,653,168
1928	1,402,455	262,198	1,511,191	605,125	44,265	.....	.....	52,265	3,094,239	.....	6,938,708
1929	1,356,555	236,840	1,455,213	568,647	35,647	.....	33	51,625	2,923,827	.....	6,758,075
1930	1,234,382	227,885	1,221,542	541,537	29,784	.....	32	44,291	2,120,237	.....	5,419,190
1931	1,020,694	171,610	905,574	422,761	27,036	.....	100	30,434	1,668,451	.....	4,266,660
1932	1,134,311	136,188	1,097,382	497,006	20,583	.....	133	27,366	1,619,921	.....	4,532,892
1933	1,123,357	120,911	1,052,910	449,681	39,437	.....	32	18,449	1,599,061	.....	4,304,838
1934	1,067,898	127,658	986,639	391,639	53,947	31	.....	13,739	1,687,850	.....	4,350,874
1935	1,246,959	221,758	1,120,816	435,813	64,659	.....	.....	24,712	1,960,555	.....	5,075,272
1936	1,386,690	244,928	1,238,730	450,740	63,886	.....	.....	27,397	1,969,569	.....	5,353,940
1937	1,326,054	269,023	1,085,812	437,954	62,521	82	.....	41,328	2,028,389	.....	5,251,163
1938	1,278,932	238,435	1,011,207	413,663	74,111	83	.....	32,507	1,871,852	.....	4,920,800
1939	1,241,618	239,227	1,044,367	409,046	90,206	.....	.....	33,139	2,109,693	.....	5,167,287
1940	1,311,644	237,642	1,019,035	354,857	231,606	14	.....	35,354	2,720,793	.....	5,812,926
1941	1,335,606	304,928	1,052,913	430,663	231,258	.....	.....	32,742	3,090,290	.....	6,481,748
1942	1,474,795	652,222	1,269,669	580,336	231,258	.....	.....	98,197	2,864,586	.....	7,171,063
1943	1,560,212	864,911	1,455,612	627,368	1,190	.....	.....	209,535	2,098,535	.....	7,071,753
1944	1,424,293	678,960	1,225,075	533,027	10,163	.....	.....	266,664	2,583,101	1,064	6,742,643
1945	1,567,940	868,396	1,541,882	541,882	278,814	.....	.....	162,698	2,416,803	.....	7,098,928
1946	1,608,296	982,413	1,449,002	658,733	348,137	.....	.....	137,271	2,893,207	.....	8,136,694
1947	1,671,130	899,403	1,475,006	583,414	162,898	.....	.....	91,235	2,504,604	.....	7,433,989

NOTE: Previous to 1920 Railroad Coal was included in Sales in Alberta.

Included in the above totals are 49,298 tons for Ship's Bunkers in 1943, 20,296 tons in 1944, 20,394 tons in 1945, 21,770 in 1946, and 4,107 in 1947. The above also includes 37,865 tons shipped to China in 1946 and 27,731 in 1947, also 14,461 tons sent to Japan in 1947.

Coal produced by years from 1943 to 1947:

BITUMINOUS COAL FIELD

Area	1943	1944	1945	1946	1947
Group 1:					
Cascade	343.476	363.314	318.036	313.608	280.769
Nordegg	320.549	351.869	315.857	333.368	343.720
Group 2:					
Crownsnest	1,962.557	1,943.068	1,856.540	2,256.741	1,967.880
Mountain Park	843.411	892.954	970.303	1,109.465	954.949
Group 3:					
Coalspur	713.082	651.340	617.286	832.987	754.775
Halcourt	1.873	553	649	1,662	1,017
Lethbridge	579.234	481.896	451.538	469.618	462.322
Morley			1,603	1,238	1,738
Pekisko	11.802	5.864	2,739	1,885	3,389
Pincher	451	660	231	488	681
Prairie Creek	1.828	7.637	6,013		655
Saunders	64.789	63.926	59.926	68.146	65.342
No Area			42	390	139
Total	4,843.052	4,783.081	4,600.763	5,389.596	4,837.376

SUB-BITUMINOUS COAL FIELD

Group 4:					
Ardley	10.239	7.109	14.319	12.228	15.368
Big Valley	12.836	5.471	7.824	10.106	14.230
Brooks	30.381	85.364	220.114	130.604	134.643
Carbon	68.391	46.379	71.733	78.149	70.159
Champion	11.776	7.177	7.329	7.348	8.296
Drumheller	1,838.738	1,676.132	1,722.816	1,946.170	1,857.416
Edmonton	457.032	389.330	408.068	478.900	493.133
Gleichen	21.369	16.430	18.100	16.676	14.940
Milk River	2.634	1.629	2.323	1.084	1.605
Pembina	53.611	72.187	65.009	60.106	95.468
Taber	20.596	75.066	243.978	289.849	128.376
Wetaskiwin	3.272	1.085	1.595	1,389	1,385
Whitecourt	179	287	150	79	231
Group 5:					
Camrose	63.834	65.295	84.836	90.766	83.512
Castor	59.764	40.450	85.605	71.166	72.058
High Prairie	191	588	85		
Pakowki	419	216	385	123	16
Redcliff	28.165	10.638	10.470	8.427	8.603
Rochester	7.287	4.257	7.595	5.949	5.748
Sheerness	58.933	49.786	60.223	56.193	54.194
Tofield	5.313	101.495	167.778	168.640	177.120
Westlock			150	907	719
No Area		2,581			
Total	2,834.930	2,664.352	3,200.485	3,434.859	3,237.220

THE MINES BRANCH

Total output of BITUMINOUS COAL by areas during each month:

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 1:													
Cascade	25,643	23,271	25,689	25,689	25,448	23,170	15,432	24,135	22,851	23,800	21,715	25,566	280,769
Nordegg	23,660	17,272	22,641	25,242	31,803	31,117	33,532	30,817	32,303	31,866	32,219	32,257	343,720
Group 2:													
Crowsnest	176,049	105,541	157,759	163,613	165,265	169,753	162,635	167,836	165,501	181,647	171,612	180,669	1,967,880
Mountain Park	66,102	57,520	75,116	78,661	85,980	82,343	99,127	82,823	104,882	61,985	79,536	80,874	954,949
Group 3:													
Coalspur	65,599	59,310	70,574	59,293	66,315	59,133	60,721	53,559	60,981	61,835	67,612	69,843	754,775
Halcourt	204	190	49			35	36	32		77	142	252	1,017
Lethbridge	48,036	41,873	43,165	37,635	35,363	33,186	22,163	34,061	37,869	42,111	41,110	45,340	462,322
Morley	226	213	157	66		92	100	186	200	118	179	201	1,738
Petisko	30	20	6	317	103	310	365	445	453	520	400	420	3,389
Pincher Creek	101	45	35	30	20	48	35	45		180	78	64	681
Prairie Creek	141	64	27	37	32	20	23	7		45	141	118	655
Saunders	6,152	6,385	6,588	5,723	5,649	5,536	3,586	4,317	4,730	5,351	5,307	6,018	65,342
No Area	42		97										139
Total	411,985	311,704	400,183	396,306	415,978	413,743	397,746	398,263	429,770	409,535	420,041	442,122	4,837,376

Total output of SUB-BITUMINOUS COAL by areas during each month:

Group 4:	2,427	2,170	417	66	41	27	21	115	837	2,031	4,547	2,669	15,368
Ardley	1,805	2,056	1,244	517	310	165	214	522	1,113	1,461	2,182	2,681	14,230
Big Valley	17,132	9,831	7,272	858	166	1,218	1,504	5,160	14,827	31,719	31,995	12,961	134,643
Brooks	8,919	7,469	5,667	5,308	2,886	2,784	2,046	4,313	5,693	6,613	10,067	8,194	70,139
Carbon	913	933	419	342	219	364	568	879	777	926	966	990	8,296
Champion	191,650	153,354	168,713	162,600	148,266	156,363	83,355	156,759	150,383	164,725	150,652	170,396	1,857,416
Drumheller	63,526	54,533	52,104	25,198	24,068	16,510	18,783	29,291	37,243	50,513	59,287	62,077	493,133
Edmonton	1,702	1,813	1,069	512	425	704	896	1,253	1,143	1,542	2,007	1,874	14,940
Gleichen	736	62	6	3,651	13,839	3,157	4,080	6,497	6,708	9,731	10,444	12,830	1,605
Milk River	11,124	6,384	7,023	972	361	403	339	738	424	3,215	25,978	25,338	95,468
Pembina	42,928	939	26,741	140	5	10	25	25	67	147	256	268	128,376
Taber	197	255	.....	.....	.....	.....	.....	.....	.....	.....	146	85	1,385
Wetaskiwin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	231
Whitecourt	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	83,512
Group 5:	10,941	5,583	3,819	2,494	945	759	1,501	2,924	7,942	14,058	15,845	16,701	72,058
Camrose	9,425	10,197	3,899	680	525	402	944	2,213	3,101	5,830	23,233	11,609	72,058
Castor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
High Prairie	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,603
Pakowki	186	431	331	177	272	448	958	725	883	1,302	1,620	1,270	5,748
Redcliff	929	1,070	481	.....	5	13	25	9	25	253	1,707	1,223	7,104
Rochester	6,883	5,790	4,066	3,729	1,781	1,507	887	2,226	4,242	5,920	10,319	7,104	54,194
Sheerness	26,614	14,827	10,226	11,045	8,267	2,993	2,430	2,621	7,057	16,424	16,419	48,197	177,120
Tofield	210	.....	.....	.....	.....	.....	.....	.....	.....	.....	143	366	719
Westlock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	398,063	287,697	293,577	218,171	202,376	187,827	118,757	216,270	242,676	316,745	367,958	387,103	3,237,220

Total Sales of BITUMINOUS COAL for consumption by Railroad Companies:

Group 1:	11,453	11,764	12,228	15,061	11,961	10,787	7,654	13,491	12,151	11,884	9,998	13,089	141,521
Cascade	10,105	9,209	10,661	10,918	17,453	14,852	16,155	13,242	14,983	13,176	10,880	10,928	152,563
Nordegg	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Group 2:	107,280	57,664	91,748	110,609	125,882	125,291	115,219	122,978	111,713	117,932	115,995	106,584	1,308,895
Crowsnest	36,412	27,568	48,516	61,258	71,948	61,625	63,919	66,061	70,035	40,679	53,175	51,096	652,192
Mountain Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Group 3:	15,851	13,548	27,840	20,420	29,390	23,350	25,430	17,321	21,088	14,209	19,265	21,576	248,388
Coalspur	.....	.....	.....	.....	.....	.....	596	.....	.....	.....	.....	.....	596
Lethbridge	.....	.....	.....	.....	.....	.....	89	186	174	.....	.....	.....	449
Morley	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	181,101	119,753	190,993	218,266	256,534	235,905	229,062	233,280	229,244	197,880	209,313	203,273	2,504,604

Total amount of Bituminous Coal disposed of by areas during each month for consumption in Alberta:
MINE-RUN COAL

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 1: Nordegg	73	91	58	56		8	5	3	45	22	92	57	510
Group 2: Crownsnest	4,267	3,624	2,662	1,993	1,182	1,178	946	1,365	3,154	4,144	4,810	3,086	32,411
Mountain Park	545	4,778	3,802	187	134	1,492	7,920	176	18,468	3,367	366	241	41,476
Group 3: Coalspur	91	87	82	78	64	87	50	64	26	130	82	91	932
Lethbridge	785	753	363	272	245	222	219	317	665	620	967	607	6,035
Morley	226	213	97	26		92	11		26	118	179	201	1,189
Pekisko	30	20	6	317	103	310	365	445	453	520	400	420	3,389
Saunders	48	59	25	20	16	12	5	8	19	58	32	25	327
No Area	42	...	97	...	...	...	...	...	...	...	...	...	139
Halcourt .....	...	...	...	...	...	...	...	...	...	...	...	61	61
Total	6,107	9,625	7,192	2,949	1,744	3,401	9,521	2,378	22,856	8,979	6,928	4,789	86,469

LUMP COAL

Group 1: Cascade	166	145	116	80	49	65	99	55	150	282	306	270	1,783
Group 2: Crownsnest	404	296	244	250	119	355	148	414	508	338	194	142	3,412
Mountain Park	366	349	272	181	180	137	83	132	706	298	443	279	3,426
Group 3: Coalspur	1,615	1,367	1,077	821	1,075	750	1,105	996	1,834	1,894	2,263	1,417	16,214
Halcourt	176	154	37	...	...	25	27	20	...	35	113	147	753
Lethbridge	9,611	8,475	7,120	4,568	3,819	5,377	6,036	5,625	7,131	8,843	8,071	8,402	83,078
Pincher	28	...	...	...	...	...	...	...	...	119	44	43	234
Prairie Creek	120	51	7	25	...	...	24	...	15	18	94	34	415
Saunders	499	644	556	430	341	170	86	177	306	296	621	517	4,643
Total	12,985	11,481	9,429	6,355	5,583	6,897	7,608	7,446	10,650	12,143	12,149	11,251	113,959

NUT COAL

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PREPARED STOKER

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NUT-SLACK COAL

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 2: Crownsnest	48	.....	.....	.....	39	.....	.....	48
Mountain Park	39
Group 3: Coalspur	84	125	80	.....	.....	289
Halcourt	5	.....	.....	.....	.....	16
Lethbridge	580	125	428	37	36	44	74	77	62	1,463
Prairie Creek	25	.....	25
Total	580	125	476	37	125	169	193	103	73	1,880

SLACK COAL

Group 1: Cascade	574	635	655	683	587	1,186	.....	.....	.....	594	1,197	985	986	8,082
Nordegg .....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	3
Group 2: Crownsnest	2,538	1,842	1,151	1,619	3,879	3,673	4,953	4,367	4,876	5,593	1,655	1,658	.....	37,804
Group 3: Coalspur	594	111	330	364	262	43	85	87	45	170	256	85	.....	2,432
Halcourt	10	15	3	.....	.....	.....	.....	.....	.....	.....	20	25	.....	73
Lethbridge	9,919	7,236	9,285	7,012	7,068	5,812	4,255	7,126	8,100	9,776	8,950	10,276	.....	94,815
Prairie Creek	11	5	.....	.....	.....	.....	17	22	.....	.....	.....	.....	.....	55
Saunders	30	52	84	23	.....	.....	.....	37	.....	62	.....	34	.....	322
Total	13,676	9,896	11,508	9,701	11,796	10,741	9,310	11,642	13,615	16,798	11,866	13,064	.....	145,386

LUMP COAL

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 4:													
Big Valley	655	737	441	213	100	118	141	267	469	565	1,294	371	5,371
Brooks	2,152	2,225	1,312					82	207	778	943	495	8,276
Carbon	2,877	3,389	1,970	2,217	453	471	625	1,539	2,075	2,016	2,772	2,437	22,841
Champion	681	396	304	248	188	285	447	649	604	729	762	770	6,243
Drumheller	16,811	14,478	13,474	11,673	9,174	10,146	6,130	9,884	12,314	14,358	15,595	15,334	148,471
Edmonton	23,066	21,086	18,687	9,694	7,840	7,171	8,711	11,644	13,106	20,093	22,988	25,534	191,600
Gleichen	654	607	368	188	101	238	260	427	390	533	768	806	5,340
Pembina	3,054	1,850	1,195	632	9,403	860	1,264	861	979	1,721	2,654	2,937	27,410
Taber	2,138	616	864	618	215	256	241	479	318	1,576	4,532	2,109	13,962
Group 5:													
Camrose	3,987	2,543	1,767	650	247	362	328	1,411	3,052	3,865	6,220	4,842	29,274
Castor	1,408	1,681	1,001	279	210	91	332	831	802	1,332	10,941	2,432	21,340
Redcliff	186	308	144	101	272				773				1,781
Rochester	243	260	96	7	3	6			5	94	525	445	1,684
Sheerness	896	1,437	728	40	40	30	38	280	982	2,650	3,656	1,377	12,154
Tofield		4,906	1,695	277	137	281	63	284	1,876	4,281	4,924	13,496	36,430
Westlock	4,210										64	178	242
Total	63,018	56,719	44,046	26,837	28,363	20,315	18,662	28,638	39,952	53,691	78,618	73,563	532,422

NUT COAL

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 4:													
Big Valley	338	574	442	143	70	36	54	143	357	115	196	337	2,805
Brooks	121	81	242						81	81	41	82	648
Carbon	957	1,255	1,043	534	235	210	259	298	556	599	732	547	7,275
Champion	123	113	66	37	20	36	73	118	82	85	75	91	919
Drumheller	7,673	6,778	6,838	3,260	2,643	2,853	1,548	2,655	3,089	3,302	3,482	3,429	47,550
Edmonton	17,042	13,556	18,710	3,479	3,344	1,923	1,932	2,457	5,471	6,662	7,818	8,313	90,708
Gleichen	36	44	25										105
Pembina	1,560	1,099	1,325	220	893	74	167	2,099	232	362	676	775	9,482
Taber	776	192	1,500	241	102	98		155			712	1,456	5,960
Wetaskiwin	42	55	30										127
Group 5:													
Camrose	2,734	1,648	1,146	226	164	89	70	217	777	988	1,520	651	10,230
Castor	294	383	336	22			22	84	55	176	1,845	642	3,859
Sheerness	230	205	155	5					77	279	64	242	1,298
Tofield	298	718	168	6	2	1		10	37	226	72	674	2,212
Westlock										49			49
Total	32,224	26,701	32,026	8,173	7,473	5,320	4,175	8,277	10,753	13,636	18,027	16,462	183,227

PREPARED STOKER

Group 4:	51	21	11	10	14	59	63	50	130	409
Big Valley										
Brooks						41	163	164	83	83
Carbon	98	234	101	97	299	436	482	647	571	2,965
Champion	22	13	6		35	33	55	60	52	276
Drumheller	1,329	977	1,057	1,054	2,298	1,455	1,763	2,100	2,241	14,274
Edmonton	1,685	756	617	1,268	2,182	1,983	2,336	3,550	4,244	18,621
Gleichen	11	5	19	17	22	29	42	59	62	266
Pembina	169	44	4	158	277	476	329	515	378	2,350
Wetaskiwin						10	15	54	55	134
Group 5:										
Camrose	308	156	127	162	324	586	600	764	631	3,668
Castor	36	17	28	55	140	94	159	1,626	408	2,563
Sherness	175	89	44	16	92	44	112	286	253	1,151
Tofield						4	61		226	291
Westlock								68	71	139
Taber								420	239	659
Total	3,884	2,312	2,014	2,837	5,693	5,250	6,180	10,363	9,684	48,217

NUT-SLACK COAL

Group	60	9	7	216	22	23	70	191
Group 4:								
Big Valley					771	458	130	1,575
Brooks								60
Carbon							42	14,489
Drumheller	2,143	1,888	2,632	1,085	1,411	1,601	1,040	14,544
Edmonton	967	1,582	634	2,123	1,932	3,464	3,244	15,553
Pembina	1,526	1,074	1,884	2,648	3,576	769	1,971	1
Group 5:								
Canrose			1					23
Castor					950	10	13	1,929
Tofield	757			175			47	
Total	5,453	3,990	5,158	6,247	8,662	6,343	6,557	48,365

SLACK COAL

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 4:	7	92	174	301	327	388	246	391	62	279	393	374	18
Arday	166	123	174	301	327	388	246	391	62	279	393	374	675
Big Valley	272	323	174	301	327	388	246	391	62	279	393	374	289
Brooks	22	154	10	10	5,573	6,079	2,860	4,387	4,953	6,933	5,573	6,194	3,530
Carbon	11,832	8,531	6,972	5,939	3,165	2,465	2,923	4,135	6,205	9,900	10,419	11,551	196
Champion	12,647	11,005	7,439	4,239	3,165	2,465	2,923	4,135	6,205	9,900	10,419	11,551	75,846
Drumheller	11	924	1,056	461	1,080	539	1,196	701	1,086	1,300	2,571	1,225	86,113
Edmonton	1,767	924	1,056	461	1,080	539	1,196	701	1,086	1,300	2,571	1,225	13,906
Gleichen	3,069	332	332	332	332	332	332	332	332	332	332	332	4,858
Pembina	902	555	608	738	437	170	323	404	604	657	722	969	7,089
Taber	5	10	10	31	3	3	3	3	3	3	3	3	45
Group 5:	53	68	31	347	3	3	3	3	3	3	3	3	315
Camrose	704	330	324	347	3	3	3	3	3	3	3	3	5,733
Castor	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	130
Rochester	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trofied	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Westlock	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	31,478	22,135	16,948	12,038	10,593	9,641	7,548	10,038	13,313	20,010	20,702	24,312	198,756

Total amount of Bituminous Coal disposed of by areas during each month for consumption in Saskatchewan:

MINE-RUN COAL

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 2:	1,550	1,622	799	217	257	434	424	905	1,534	1,476	1,655	953	44
Cascade	95	91	799	217	257	434	424	905	1,534	1,476	1,655	953	11,831
Crowsnest	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	191
Mountain Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	753
Saunders	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
Total	1,645	1,713	799	264	257	481	471	905	1,630	1,476	1,838	1,190	12,669

LUMP COAL

[illegible]

NUT COAL

[illegible]

PREPARED STOKER

[illegible]

NUT-SLACK COAL

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 2: Crownsnest	43	.....	108	92	49	95	95	97	47	626
Group 3: Lethbridge	419	.....	.....	.....	.....	.....	.....	.....	.....	419
Saunders	33	249	.....	.....	.....	.....	.....	.....	282
Total	462	33	357	92	49	95	95	97	47	1,327

SLACK COAL

Group 2: Crownsnest	192	365	46	.....	.....	.....	2,244	52	45	115	44	116	2,846
Mountain Park .....	.....	46	.....	.....	.....	.....	47	194	194	.....	.....	.....	660
Group 3: Coalspur	150	.....	.....	354	.....	.....	143	.....	.....	517	86	39	935
Lethbridge .....	.....	.....	659	598	422	119	662	496	448	430	171	.....	1,187
Saunders	662	758	.....	.....	.....	.....	284	.....	.....	.....	367	466	5,709
Total	1,004	1,169	705	952	422	119	3,380	548	687	1,062	668	621	11,337

Total amount of Sub-Bituminous Coal disposed of by areas during each month for consumption in Saskatchewan:

MINE-RUN COAL

Group 4: Drumheller	285	715	923	11,514	4,517	5,008	5,286	8,121	7,716	8,281	7,184	8,047	67,597
Taber	1,989	.....	1,096	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,085
Group 5: Castor .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	320	572	805	1,637
Redcliff .....	.....	.....	.....	.....	41	.....	36	.....	.....	522	373	950	1,881
Sheerness	35	3,279	2,639	1,979	1,189	481	352	479	426	927	1,972	726	419
Tofield	2,285	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	485
Total	4,594	3,994	4,658	13,493	5,747	5,478	5,674	8,600	8,142	10,050	10,101	10,947	91,478

LUMP COAL

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NUT COAL

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PREPARED STOKER

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 4:													
Brooks	110	56	55				37	40	388	175	493	53	1,186
Carbon	1,105	824	320			94	3,405	149	48	218	248	757	757
Drumheller	1,207	599	772	7,228	7,073	7,702	3,405	7,150	7,155	7,665	6,703	8,298	62,379
Pembina	22,478	17,573	20,766	39	120	200	80	81	123	38	257	42	685
Taber	2,715	2,457	2,457									130	425
Group 5:													
Camrose								45	89	347	87	560	1,128
Castor				540	250	168	163	393	386	366	251	133	465
Sheerness										215		1,517	3,458
Tofield													1,732
Total				7,807	7,443	8,164	3,685	7,777	8,147	9,010	8,682	11,543	72,258

NUT-SLACK COAL

Group 4:													
Brooks				41		46	135	326	45	495	751	1,227	3,066
Carbon				2,439	3,641	3,244	1,870	3,476	5,129	5,038	3,100	4,161	32,098
Drumheller										91			91
Pembina				160								49	209
Group 5:													
Tofield													
Total				2,640	3,641	3,290	2,005	3,802	5,174	5,624	3,851	5,437	35,464

SLACK COAL

Group 4:													
Big Valley	110	56	55										452
Brooks	1,105	824	320	57		131	126	235	878	231	2,056	125	8,033
Carbon	1,207	599	772	206	110	57	57	47	505	505	528	615	4,646
Drumheller	22,478	17,573	20,766	12,819	11,788	12,783	6,498	12,602	12,198	14,030	14,150	15,694	173,379
Taber	2,715	2,457	2,457								943	2,182	8,297
Group 5:													
Camrose													456
Castor	578	66	47	285	192	203	147	210	203	209	170	301	1,162
Sheerness	221	205	179			43					304	254	2,612
Tofield	1,885	1,256	43									1,114	4,341
Total	30,299	20,579	24,639	13,367	12,090	13,160	6,828	13,047	13,372	17,432	18,151	20,414	203,378

Total amount of Bituminous Coal disposed of by areas during each month for consumption in British Columbia:

MINE-RUN COAL

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LUMP COAL

[illegible]

NUT COAL

	70	45	40	43	86	44	
Group 1:							
Cascade	573	404					2,361
Group 2:							
Crownest	1,039	2,061					8,148
Mountain Park	962	2,374					14,128
Group 3:							
Coalspur	16,660	13,211					60,379
Lethbridge	877	1,237					10,068
Saunders	33	43					185
Total	20,284	19,350	2,944	1,711	3,399	3,013	95,269

PREPARED STOKER

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 1:													
Cascade	259	693	130	174	351	436	495	775	405	3,718
Group 2:				1,648	1,460	1,258	665	369	1,291	1,512	1,506	1,734	11,443
Crowsnest	2,756	216	128	219	311	443	359	427	387	5,246
Mountain Park	6,311	5,955	5,516	5,207	4,451	5,522	5,829	6,366	6,780	51,937
Group 3:				86	176	42	46	193	41	..	58	46	688
Coalspur
Lethbridge
Total	11,060	8,500	7,074	6,311	5,675	7,733	8,195	9,132	9,352	73,032

NUT-SLACK COAL

Group 2:													
Crowsnest .....	.....	.....	.....	3,911	1,282	1,254	935	1,523	1,284	368	1,285	449	12,291
Group 3:				.....	.....	.....	.....	485	447	608	.....	.....	1,540
Coalspur .....	.....	.....	.....	46	.....	.....	.....	.....	.....	.....	.....	.....	46
Lethbridge .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total .....	.....	.....	.....	3,957	1,282	1,254	935	2,008	1,731	976	1,285	449	13,877

SLACK COAL

Group 2:													
Crowsnest	11,910	4,994	15,384	15,250	13,905	12,323	8,479	10,539	9,227	8,075	10,795	5,739	126,620
Mountain Park	10,376	12,279	8,166	3,308	4,777	9,041	2,445	3,067	3,004	3,451	5,480	1,014	66,408
Group 3:													
Coalspur	3,445	3,104	2,696	1,649	1,741	2,869	1,449	3,105	2,903	4,539	3,632	3,486	34,618
Lethbridge	145	..	790	1,097	797	1,255	.....	1,049	512	.....	75	.....	5,720
Total	25,876	20,377	27,036	21,304	21,220	25,488	12,373	17,760	15,646	16,065	19,982	10,239	233,366

THE MINES BRANCH

PREPARED STOKER

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 4:													
Big Valley					6				92	263	368	136	142
Brooks				44	94	46	95	47	45	178	178	86	974
Carbon				2,045	1,485	1,325	983	1,327	1,282	1,751	1,112	1,995	591
Drumheller				88	40						38	40	13,305
Edmonton											611	365	88
Pembina												158	118
Taber													976
Group 5:													
Camrose													158
Total				2,177	1,625	1,371	1,078	1,374	1,419	2,014	2,307	2,987	16,352

NUT-SLACK COAL

Group 4:													
Brooks				359	253	201		125	92	278	48	201	527
Drumheller				89	41	44			178	166		89	1,285
Pembina										183		872	1,407
Total				448	294	245		125	270	627	48	1,162	3,219

SLACK COAL

Group 4:													
Brooks	177	1,114	981	1,310	1,660	1,165	944	1,064					177
Drumheller	840										618		9,078
Pembina			2,674							126	1,654	1,624	618
Taber	1,641												7,719
Total	2,658	1,114	3,655	1,310	1,660	1,165	944	1,064		126	2,272	1,624	17,592

Total amount of Bituminous Coal disposed of by areas during each month for consumption in Manitoba:

MINE-RUN COAL											
Group 1: Cascade .....	.....	90	136	87	242	93	177	89	914		
Group 2: Crownsnest	1,002	998	48	475	376	693	252	143	4,862		
Mountain Park .....	.....	150	313	1,266	1,313	282	608	333	6,563		
Group 3: Lethbridge .....	.....	.....	.....	.....	.....	40	.....	.....	40		
Saunders .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	1,002	1,148	535	1,548	1,450	1,061	1,037	565	12,379		

LUMP COAL											
Group 1: Cascade	45	.....	51	44	.....	179	176	87	46	628	
Group 2: Crownsnest	1,565	711	2,266	867	686	667	551	1,134	732	13,940	
Mountain Park	264	218	169	42	180	171	95	395	545	2,359	
Group 3: Coalspur	2,776	2,205	2,708	2,874	2,020	2,823	2,932	3,486	4,211	35,858	
Lethbridge	2,283	2,046	1,786	2,153	1,731	1,378	1,469	1,626	1,628	20,933	
Saunders	1,077	996	1,065	634	1,264	894	955	820	732	11,480	
Total	8,010	6,176	7,994	8,387	6,379	6,112	6,178	7,548	8,543	85,198	

NUT COAL											
Group 1: Cascade	753	409	519	.....	43	.....	.....	45	.....	1,769	
Group 2: Crownsnest	676	149	857	.....	240	605	1,016	2,042	1,309	8,503	
Mountain Park	1,266	1,378	2,056	.....	.....	.....	.....	.....	1,023	4,700	
Group 3: Coalspur	2,819	905	2,046	1,608	162	132	52	44	39	8,893	
Lethbridge	731	437	390	257	477	562	386	544	428	3,506	
Saunders	212	170	320	176	302	141	69	216	156	1,703	
Total	6,457	3,448	6,188	2,041	1,773	1,440	1,523	2,891	1,932	32,074	

PREPARED STOKER

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 1: Cascade				215	565	308	89	479	407	306	438	510	3,317
Group 2: Crownsnest				796	539	101	89	114	345	616	660	346	3,606
Mountain Park				1,465	1,127	1,036	1,085	1,240	1,735	1,472	1,730	2,022	12,912
Group 3: Coalspur				43	910	370	288	330	798	933	1,431	485	5,588
Lethbridge				43		46		93	137	88	46	45	498
Total				2,562	3,141	1,861	1,551	2,256	3,422	3,415	4,305	3,408	25,921

NUT-SLACK COAL

Group 2: Crownsnest				3,193	1,640	1,716	1,353	6,595	4,838	5,581	4,343	6,413	35,672
Mountain Park					44			130					174
Group 3: Coalspur									79	79			158
Lethbridge				47									47
Saunders						209							209
Total				3,240	1,684	1,925	1,353	6,725	4,917	5,660	4,343	6,413	36,260

SLACK COAL

Group 1: Cascade		12											12
Group 2: Crownsnest	9,727	3,785	5,816					42	146				19,870
Mountain Park	2,284	2,085	2,079	2,148	1,878	1,967	2,057	3,021	2,194	4,906	5,424	4,452	34,495
Group 3: Coalspur	802	711	360	353	220	609	731	*	530		260	383	5,178
Lethbridge		141						219					141
Saunders	318	195	398	485	530	256	293	179	265	312	307	447	3,985
Total	13,131	6,929	8,653	2,986	2,732	2,832	3,331	3,461	3,135	5,218	5,991	5,282	63,681

Total amount of Sub-Bituminous Coal disposed of by areas during each month for consumption in Manitoba:

MINE-RUN COAL											
Group 4:											
Drumheller	82										27,189
Taber	2,479	128	5,075	2,455	2,718	1,702	3,499	2,763	3,256	2,576	2,935
Group 5:		76									2,555
Tofield	115	41	117	214							938
Total	2,676	245	5,192	2,669	2,718	1,702	3,499	2,763	3,256	2,576	30,682
LUMP COAL											
Group 4:											
Big Valley		47									97
Brooks	3,170	1,320	1,186		199	253	630	2,277	5,842	4,707	50
Carbon					524	188	123	256	45	169	1,380
Drumheller	19,136	15,262	17,514	372	17,464	8,563	16,297	15,941	16,833	14,894	208
Edmonton	336	252	331	16,418	42	127	43	289	459	179	193,786
Pembina	47			422	165			384	124	261	3,295
Taber	3,692		2,719						81	2,366	1,795
Group 5:											11,898
Camrose									171	88	170
Castor	44	41	42	36	41			344	126	970	429
Tofield	1,709	1,185							770	342	1,877
Total	28,134	18,060	22,039	17,903	17,038	9,131	17,093	19,491	24,451	23,376	7,189
											243,215
NUT COAL											
Group 4:											
Big Valley			46								46
Brooks	1,038	260	390				166	220	418	246	82
Carbon	47	48	48	183	44	133	47	48	90	173	82
Drumheller	6,887	5,091	5,706	1,566	1,180	1,057	1,549	893	2,176	1,664	1,036
Edmonton			43								173
Pembina			48			42					31,419
Taber	1,095		1,567							1,205	43
Group 5:											50
Castor	84			34		40					84
Tofield	495	132								296	997
Total	9,646	5,531	7,848	1,783	1,224	1,355	1,762	1,161	2,684	3,288	41,792

PREPARED STOKER

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 4:													
Brooks	41	39	.....	121	40	40	281
Carbon	46	47	47	48	45	87	88	89	497
Drumheller	664	466	669	357	429	464	633	512	729	4,923
Pembina	44	38	403	124	44
Taber	565
Total	664	512	716	445	516	553	879	1,043	982	6,310

NUT-SLACK COAL

Group 4:													
Brooks	.....	.....	.....	.....	.....	.....	.....	305	91	957	632	180	2,165
Drumheller	.....	.....	.....	173	529	207	83	391	481	176	433	292	2,765
Total	.....	.....	.....	173	529	207	83	696	572	1,133	1,065	472	4,930

SLACK COAL

Group 4:													
Drumheller	44	174	124	55	143	50	.....	173	90	.....	.....	.....	850
Taber	.....	.....	122	.....	.....	.....	.....	.....	.....	.....	.....	.....	122
Total	44	174	246	55	143	50	.....	173	90	.....	.....	.....	972

Total amount of Bituminous Coal disposed of by areas during each month for consumption in Ontario:

MINE-RUN COAL

Group 2:													
Crowsnest	1,714	1,524	1,609	1,770	673	.....	.....	.....	47	.....	.....	9,430	9,477
Mountain Park	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,290
Total	1,714	1,524	1,609	1,770	673	.....	.....	.....	47	.....	.....	9,430	16,767

NUT-SLACK COAL

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 2: Crowsnest						60				61			1,060
Group 3: Coalspur				939				128	250	208			586
Total				939		60		128	250	269			1,646

SLACK COAL

Group 2: Crowsnest	1,208	1,615	1,843										4,666
Group 3: Coalspur							44			215	40		299
Saunders											40		40
Total	1,208	1,615	1,843				44			215	80		5,005

Total amount of Sub-Bituminous Coal disposed of by areas during each month for consumption in Ontario:

MINE-RUN COAL

Group 4: Drumheller				915	46	46		42					1,049
Taber	153		48										201
Total	153		48	915	46	46		42					1,250

LUMP COAL

Group 4:	47	...	84	633	242	...	160	235	1,204	2,550	3,304	3,119	1,184	47
Big Valley	1,041			46	47					228	92			13,756
Brooks				2,812	3,735		3,357	2,795	4,380	3,195	3,800	3,188	3,263	413
Carbon	4,419	2,069			88		454	411	506	498	518	285	611	38,654
Drumheller	339	129		44							705	989	1,312	4,477
Edmonton				755								2,234	2,284	3,050
Pemina														9,329
Taber	4,056													
Group 5:														
Camrose	592	94		48			236	142	353	1,645	2,611	1,792	2,219	9,732
Castor	417	41										86	172	716
Tofield	694	82		87	36					364	541		3,305	5,109
Total	11,605	2,499	4,425	4,148	4,047	3,366	2,676	6,443	8,480	11,571	11,673	14,350	85,283	

NUT COAL

Group 4:	47	256	391	43	140	719	267	43	374	664	737	173	47
Big Valley	847		48						48				3,485
Brooks		481	731	341				350	395	337	512	521	137
Carbon	844												5,632
Drumrell	4	44	43								129	124	46
Edmonton	338		172								635	324	678
Pembina	1,110												2,241
Taber													
Group 5:													
Canrose	47	51						48	222	1,049	675	1,309	3,775
Castor	52	46				42				44		49	103
Tofield	21												398
Total	3,973	878	1,385	384	140	761	261	441	1,037	2,094	2,688	2,500	16,542

PREPARED STOKER

[illegible]

PREPARED STOKER

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 2: Crownsnest	98	.....	46	46	998	328	77	439	590	2,622
Group 3: Coalspur	62	164	53	27
Lethbridge	45	90	47	45	227
Total	98	.....	46	46	998	373	229	650	688	3,128

NUT-SLACK COAL

Group 2: Crownsnest	.....	.....	.....	853	1,026	624	774	684	886	1,025	1,432	1,261	8,565
Group 3: Lethbridge	.....	.....	.....	86	.....	.....	.....	.....	.....	.....	.....	.....	89
Total	.....	.....	.....	939	1,026	624	774	684	886	1,025	1,432	1,261	8,651

SLACK COAL

Group 2: Crownsnest	6,956	4,294	5,986	1,146	100	.....	154	379	1,621	2,372	191	.....	23,199
Group 3: Coalspur	.....	.....	1,486	971	1,108	.....	1,474	523	.....	113	.....	.....	5,680
Total	6,956	4,294	7,472	2,117	1,208	.....	1,633	902	1,621	2,485	191	.....	28,879

Total amount of Sub-Bituminous Coal disposed of by areas during each month for consumption in the United States:

LUMP COAL

Group 4: Drumheller Taber	98 274	87	.....	130	.....	42	42	.....	80	.....	84	44	607 274
Total	372	87	.....	130	.....	42	42	.....	80	.....	84	44	881

NUT COAL

Group 4: Drumheller Taber	44 639	42 45	94	43	223 684
Total	683	87	94	43	907

PREPARED STOKER

Group 4: Taber				175	175
Total				175	175

SLACK COAL

Group 4: Taber	192				192
Total	192				192

Amount of Bituminous Coal used under Colliery Boilers by areas during each month:

Group 1: Cascade Nordegg	1,848 669	1,589 637	1,795 716	1,928 748	1,888 292	1,764 606	1,551 623	1,955 596	1,627 750	1,655 779	1,590 874	1,805 664	20,995 8,454
Group 2: Crownsnest Mountain Park	2,155 4,628	1,871 4,018	1,923 4,594	1,522 4,088	1,045 3,970	996 3,806	837 4,706	1,020 4,240	1,072 4,432	1,526 4,200	1,783 4,321	1,855 4,485	17,605 51,388
Group 3: Coalspur Halcourt Lethbridge Saunders	3,824 389 728	3,625 221 714	4,095 309 721	3,725 149 631	3,353 103 663	4,067 118 605	3,143 69 479	4,559 107 545	3,694 129 583	4,424 125 650	3,962 5 617	3,903 3 690	46,554 31 2,334 7,626
Total	14,248	12,682	14,157	12,791	11,994	11,963	11,308	13,023	12,287	13,364	13,415	13,755	154,987

Amount of Sub-Bituminous Coal used under Colliery Boilers by areas during each month:

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 4:													
Carbon	116	122	104	90	79	80	48	85	91	101	110	107	1,133
Drumheller	990	916	868	725	617	562	398	635	658	703	821	856	8,749
Edmonton	526	528	349	479	312	226	253	260	263	319	325	417	3,457
Pembina	397	371	372	260	233	239	237	229	293	304	265	279	3,479
Group 5:													
Camrose	20	20	20	20	10	10	10	10	10	10	15	15	170
Castor	30	30	...	21	11	10	30	30	30	35	48	...	275
Tofield	50	50	50	50	50	50	25	25	25	50	50	50	525
Total	2,129	2,037	1,893	1,515	1,312	1,177	1,001	1,274	1,370	1,522	1,634	1,724	18,588

Amount of Bituminous Coal used by Colliery Railroads by areas during each month:

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 1:													
Cascade	45	40	42	42	42	40	28	40	46	44	38	52	499
Group 2:													
Crowsnest .....	...	...	...	...	...	15	15	15	15	15	15	15	105
Group 3:													
Coalspur	62	565	59	65	73	48	8	32	52	53	70	72	1,159
Lethbridge .....	...	165	...	...	...	...	...	...	...	...	...	...	165
Total	107	770	101	107	115	103	51	87	113	112	123	139	1,928

Amount of Bituminous Coal used making Briquettes:

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 1:													
Cascade	7,650	7,094	6,442	6,828	8,971	8,260	5,503	6,895	6,183	6,747	6,235	7,319	84,127
Nordegg	12,086	8,252	10,462	13,679	13,455	14,615	16,785	17,242	16,517	18,477	19,993	20,488	182,051
Total	19,736	15,346	16,904	20,507	22,426	22,875	22,288	24,137	22,700	25,224	26,228	27,807	266,178

Amount of Bituminous Coal used making Coke:

Group 2:	6,960	6,231	6,706	6,902	6,746	6,367	7,249	6,378	6,076	7,793	6,985	6,735	81,128
Crowsnest													
Total	6,960	6,231	6,706	6,902	6,746	6,367	7,249	6,378	6,076	7,793	6,985	6,735	81,128

Amount of Bituminous Coal Put to Stock by areas during each month:

Group 1:	478	125	462	383	291	369	298	278	343	244	301	344	3,916
Cascade	727	744	744	...	118	150	...	30	58	...	380	160	2,367
Nordegg													
Group 2:	1,380	6,159	2,182	170	...	2,387	1,205	...	3,974	3,365	899	6,438	28,159
Crowsnest													
Group 3:	67	512	1,257	44	11	67	84	...	85	62	62	3,084	4,078
Coalspur	119	1,896	1,257	717	708	681	618	578	606	236	338	389	8,143
Lethbridge			60	40	...	...	...	...	...	...	...	...	100
Morley	40	33	28	20	15	36	28	30	...	...	...	...	230
Pincher	10	8	20	12	32	20	...	...	...	25	...	39	166
Prairie Creek													
Total	2,821	8,733	4,753	1,386	1,175	3,710	2,233	916	5,066	3,932	1,980	10,454	47,159

Amount of Sub-Bituminous Coal Put to Stock by areas during each month:

Group 4:	50	100	25	40	15	...	...	45	388	...	3	...	275
Big Valley			90	...	...	...	...	113	...	...	10	...	594
Drumheller .....				...	...	...	...	...	...	...	...	...	10
Edmonton			33	...	...	...	...	...	...	...	...	...	33
Pembina .....				...	...	...	...	...	...	...	...	...	...
Group 5:				...	...	...	...	...	...	63	109	217	389
Castor .....				...	...	...	...	...	...	50	...	35	85
Tofield .....				...	...	...	...	...	...	...	...	75	75
Westlock .....				...	...	...	...	...	...	...	...	...	...
Total	50	100	148	40	15	...	...	158	388	113	122	327	1,461

Amount of Bituminous Coal Lifted from Stock by areas during each month:

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 1:													
Cascade	335	478	125	462	383	291	369	298	278	343	244	301	3,907
Nordegg .....	.....	917	.....	159	15	114	45	300	50	588	.....	40	2,228
Group 2:													
Crowsnest	2,429	1,353	.....	6,321	3,107	55	1,881	2,378	175	363	4,629	1,098	23,789
Group 3:													
Conspur	30	12	1,037	16	33	12	22	138	28	74	.....	39	1,441
Lehrbridge	108	119	1,896	1,212	717	708	681	618	578	606	236	338	7,817
Prairie Creek .....	.....	.....	.....	.....	.....	.....	18	42	15	.....	20	.....	95
Total	2,902	2,879	3,058	8,170	4,255	1,180	3,016	3,774	1,124	1,974	5,129	1,816	39,277

Amount of Sub-Bituminous Coal Lifted from Stock by areas during each month:

Group 4:													
Drumheller .....	.....	.....	.....	90	.....	.....	.....	.....	.....	.....	218	.....	308
Edmonton .....	.....	.....	.....	124	.....	.....	.....	.....	.....	.....	.....	.....	124
Group 5:													
Castor .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49	131	131
Westlock .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	16	75
Total .....	.....	.....	.....	214	.....	.....	.....	.....	.....	49	228	147	638

Amount of Bituminous Coal Lifted from Waste by areas during each month:

Group 2:													
Crowsnest .....	.....	.....	.....	1,160	2,960	2,465	3,650	2,900	3,440	3,345	810	137	20,867
Total .....	.....	.....	.....	1,160	2,960	2,465	3,650	2,900	3,440	3,345	810	137	20,867

Amount of Sub--Bituminous Coal Lifted from Waste by areas during each month:

Group 4: Drumheller	1,070	147	281	.....	.....	.....	.....	131	94	227	200	2,150
Group 5: Camrose	264	.....	.....	.....	360	.....	.....	.....	.....	.....	.....	360
Castor .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	264
Westlock .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	42
Total	1,334	147	281	.....	360	.....	.....	131	94	227	242	2,816

Amount of Bituminous Coal Put to Waste by areas during each month:

Group 1: Cascade	30	40	40	35	30	20	20	20	50	40	40	365
Group 2: Crownsnest	7,715	4,001	7,586	9,150	7,749	8,183	6,537	6,980	9,712	10,637	8,526	94,612
Group 3: Coalspur	1,290	1,178	1,178	1,888	2,102	1,557	1,820	1,338	2,705	2,022	611	19,870
Halcourt	16	18	12	15	18	15	18	19	22	22	18	211
Lethbridge	21	12	7	10	5	12	7	15	33	14	10	146
Pincher .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	9,072	5,252	9,423	11,098	9,904	9,787	8,402	8,352	9,455	12,735	9,205	115,207

THE MINES BRANCH

Amount of Sub-Bituminous Coal Put to Waste by areas during each month:

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 4:													
Ardley	20	30	5	16	6	23	26	84	264	297	451	253	55
Carbon	217	55	15	25	18	37	48	77	58	57	69	77	1,706
Champion	87	70	39	25	18	37	48	77	131	94	227	200	662
Drumheller	169	147	66	27	54	...	...	...	...	...	...	...	1,034
Edmonton	40	60	150	27	...	...	...	...	...	...	...	...	331
Pembina	517	90	9	...	...	...	49	104	106	302	1,283	135	616
Taber	3,600	131	774	113	44	49	...	...	...	...	...	...	6,690
Group 5:													
Camrose	35	48	22	362	5	1	1	...	6	27	57	33	597
Castor	63	513	44	40	3	...	...	...	180	113	1,511	703	3,170
Rochester	10	10	5	...	...	...	...	...	...	...	30	20	75
Sheerness	421	275	214	82	...	4	2	3	213	182	531	364	2,291
Tofield .....	...	...	...	11	3	2	2	...	...	25	120	75	238
Westlock	92	...	...	...	...	...	...	...	...	...	12	...	104
Total	5,271	1,429	1,343	676	133	115	128	268	958	1,097	4,291	1,860	17,569

Output and Number of Mines Producing

Kind of Coal	Under 1,000 tons		1,000 to 5,000 tons		5,000 to 10,000 tons		10,000 to 50,000 tons		50,000 to 100,000 tons		100,000 to 150,000 tons		150,000 to 200,000 tons		200,000 to 300,000 tons		Over 300,000 tons		Total	
	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output	No.	Output		
Bituminous	12	2,896	5	10,960																
Sub-Bituminous	49	23,007	41	93,708	1	8,660	4	118,401	2	106,889	1	107,868	2	349,599	8	1,976,434	5	2,155,669	40	4,837,376
					16	107,907	24	593,108	10	808,282	6	706,363	4	703,973	1	200,872		....	151	3,237,220
Total	61	25,903	46	104,668	17	116,567	28	711,509	12	915,171	7	814,231	6	1,053,572	9	2,177,306	5	2,155,669	191	8,074,596

THE MINES BRANCH

Number of men employed in the BITUMINOUS FIELD as at December 31, 1947:

Areas	UNDERGROUND						ABOVE GROUND						STRIPPING			GRAND TOTALS				
	Salaried Employees	Foremen	Miners	Maintenance	Trans- portation	Total Underground	Salaried Employees	Foremen	Maintenance	Trans- portation	Tipple and Shipping	Powerhouse	All other Employees	Total Above Ground	Salaried Employees	Wage Earners	Total Stripping	Total Salaried Employees	Total Wage Earners	Grand Total
Group 1:																				
Cascade	22	1	80	20	32	155	19	1	15	16	23	34	26	134				41	248	289
Nordeg	5	12	88	26	55	186	11	5	8	10	48	26	59	167				21	358	379
Group 2:																				
Crownest	109	16	804	269	346	1,544	88	7	39	48	245	159	36	622	4	126	130	201	2,095	2,296
Mountain Park	38	4	145	110	132	429	41	5	15	3	104	87	60	315	24	98	122	103	763	866
Group 3:																				
Coalspur	24	2	188	46	55	315	19	3	...	12	62	50	48	194	24	135	159	67	601	668
Halcourt		1	1	1	1	1	1	1	2	11	56	45	33	182			3	43	4	4
Lethbridge	9	25	294	75	85	488	34	1	...	1	...	...	...	...	...	...	...	...	627	670
Morley	1	1	2	...	...	3	1	...	...	...	...	...	...	1	...	...	...	1	7	8
Pekisko	1	1	6	...	...	7	1	...	...	...	...	...	...	1	...	...	...	1	2	2
Fincher	1	1	3	...	1	2	2	...	...	...	...	...	...	2	...	...	...	1	5	6
Prarie Creek	5	3	64	9	16	97	6	2	2	3	14	8	3	38				11	124	135
Saunders																				
Total	214	66	1,674	555	722	3,231	219	24	81	104	553	410	265	1,656	57	383	440	490	4,837	5,327

THE MINES BRANCH

Men employed above and below ground in the BITUMINOUS FIELD by areas during each month:

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Monthly Average
Group 1:													
Cascade	316	314	312	290	303	294	300	298	294	286	294	289	299
Nordegg	443	425	414	351	380	399	395	376	361	359	376	379	388
Group 2:													
Crowsnest	2,253	2,244	2,241	2,291	2,251	2,182	2,193	2,188	2,207	2,273	2,304	2,296	2,243
Mountain Park	795	781	769	836	826	893	914	863	927	906	894	866	856
Group 3:													
Coalspur	721	697	718	646	657	671	680	697	681	678	684	668	675
Halcourt	13	8	4	...	...	2	2	2	...	4	2	4	4
Lethbridge	683	684	668	631	589	572	584	598	600	612	648	670	628
Morley	4	3	3	3	...	2	3	3	3	3	2	4	3
Pekisko	1	1	1	7	...	5	5	6	6	6	8	8	5
Pincher	5	3	3	4	2	2	2	2	...	4	2	2	3
Prairie Creek	14	7	7	7	7	7	7	7	6	6	7	6	7
Saunders	141	146	144	139	130	121	112	107	117	120	129	135	128
No Area	8	...	14	...	...	...	...	...	...	...	...	...	11
Total	5,397	5,313	5,298	5,205	5,150	5,150	5,197	5,147	5,202	5,257	5,350	5,327	5,250

Men employed above and below ground in the SUB-BITUMINOUS FIELD by areas during each month:

Group 4:		18	15	9	3	2	2	1	5	7	17	20	19	9
Ardley	36	41	37	23	16	11	10	10	17	28	34	39	41	28
Big Valley	53	53	50	53	48	49	51	51	71	73	111	122	106	70
Brooks	112	112	101	107	69	64	61	61	88	74	86	99	115	91
Carbon	22	20	19	14	12	13	17	18	18	19	22	22	24	18
Champion	2,247	2,264	2,235	2,215	2,103	2,155	2,155	2,155	2,176	2,123	2,165	2,251	2,273	2,214
Drumheller	782	741	740	487	458	463	452	493	493	593	665	778	789	620
Edmonton	49	57	45	33	17	24	23	24	24	26	31	37	39	34
Gleichen	11	5	3											5
Milk River	11	86	117	62	110	66	77	77	77	80	96	108	120	96
Pembina	157	12	113	21	12	12	12	12	12	6	48	121	83	45
Taber	92	3	3	1			1	1	2	2	2	4	4	2
Wetaskiwin	4													2
Whitecourt														1
Group 5:		97	88	80	63	56	54	54	84	98	123	110	113	85
Canrose	128	122	92	18	21	19	29	29	53	61	108	149	122	77
Castor														1
Pakowki	7	7	8	8	10	10	18	18	14	13	17	23	20	13
Redcliff	10	9	8	4	3	3	3	3	3	3	6	12	10	6
Rochester	38	31	23	38	32	14	13	13	13	14	30	46	41	28
Sheerness														
Tofield	114	102	77	54	42	42	36	36	30	55	90	83	147	73
Westlock	5										3	8	7	6
Total	3,983	3,768	3,760	3,204	3,011	3,000	3,011	3,011	3,180	3,280	3,656	4,038	4,078	3,522

Men employed above and below ground in the BITUMINOUS and SUB-BITUMINOUS FIELDS by areas during each month:

Bituminous		5,397	5,313	5,298	5,205	5,150	5,150	5,197	5,147	5,202	5,257	5,350	5,327	5,250
Sub-Bituminous		3,983	3,768	3,760	3,204	3,011	3,000	3,011	3,180	3,280	3,656	4,038	4,078	3,522
Total		9,380	9,081	9,058	8,409	8,161	8,150	8,208	8,327	8,482	8,913	9,388	9,405	8,772

THE MINES BRANCH

PER CAPITA PRODUCTION OF MINES IN THE PROVINCE

Year	Gross tons of coal mined	Total average No. of men employed	Tons of coal mined per man employed	Average No. of men employed under-ground	Tons of coal mined per man employed under-ground
1906	1,385,000	2,800	494	2,000	692
1907	1,834,745	3,600	509	2,700	679
1908	1,845,000	3,780	488	2,681	686
1909	2,174,329	5,207	417	3,893	566
1910	3,036,757	5,818	504	4,090	742
1911	1,694,564	6,689	253	4,517	375
1912	3,446,349	6,661	517	4,861	708
1913	4,306,346	8,068	533	5,837	737
1914	3,821,739	8,170	467	6,052	631
1915	3,434,891	6,445	532	4,493	764
1916	4,648,604	7,570	614	5,536	839
1917	4,863,414	8,310	595	6,047	804
1918	6,148,620	8,818	697	6,141	1,001
1919	5,022,412	7,573	663	5,150	958
1920	6,908,923	9,688	712	6,551	1,055
1921	5,937,195	10,018	592	7,203	824
1922	5,976,432	8,757	683	6,154	971
1923	6,866,923	9,927	687	7,249	893
1924	5,202,713	7,317	711	5,299	982
1925	5,883,394	8,774	670	6,498	834
1926	6,508,908	8,763	743	6,569	991
1927	6,936,780	9,016	768	6,681	970
1928	7,334,179	9,496	772	6,625	1,107
1929	7,147,250	9,572	747	7,115	1,004
1930	5,755,911	8,889	648	6,607	871
1931	4,563,309	8,070	577	5,969	701
1932	4,867,984	7,837	621	5,772	844
1933	4,714,784	8,042	586	5,937	794
1934	4,748,848	7,863	604	5,809	744
1935	5,462,973	7,800	700	5,644	969
1936	5,696,375	8,110	702	5,940	959
1937	5,551,682	7,836	708	5,806	956
1938	5,250,025	7,411	706	5,427	965
1939	5,518,105	7,456	740	5,517	1,000
1940	6,205,088	7,416	836	5,526	1,122
1941	6,970,064	7,714	903	5,652	1,233
1942	7,754,279	8,040	964	5,865	1,322
1943	7,677,982	8,636	889	6,197	1,160
1944	7,427,433	8,375	887	5,867	1,135
1945	7,801,248	8,309	939	5,752	1,298
1946	8,824,455	8,583	1,028	5,897	1,187
1947	8,074,596	8,772	920	6,090	1,017

PER CAPITA PRODUCTION OF MINES IN THE DOMESTIC COAL FIELD

Year	Gross tons of coal mined	Total average No. of men employed	Tons of coal mined per man employed	Average No. of men employed under-ground	Tons of coal mined per man employed under-ground
1910	878,011	2,307	380	1,676	524
1911	964,700	3,548	271	2,488	391
1912	1,341,389	2,980	450	2,283	587
1913	1,763,225	4,017	438	2,929	601
1914	1,697,401	4,219	402	3,190	532
1915	1,682,922	3,181	529	2,210	761
1916	2,172,801	4,132	525	3,137	692
1917	2,537,829	4,701	539	3,489	727
1918	3,035,061	4,896	619	3,420	887
1919	2,611,009	4,226	617	2,953	884
1920	3,359,308	5,173	647	3,723	902
1921	2,943,141	5,601	525	4,256	691
1922	3,086,669	4,981	620	3,752	823
1923	3,161,741	4,969	636	3,765	812
1924	3,096,660	4,543	681	3,447	898
1925	3,156,359	4,874	647	3,750	808
1926	3,160,029	4,798	658	3,713	816
1927	3,357,171	4,663	720	3,603	891
1928	3,378,200	4,810	702	3,700	873
1929	3,385,749	4,944	685	3,813	880
1930	2,874,090	4,822	596	3,756	765
1931	2,245,563	4,400	510	3,419	628
1932	2,574,785	4,548	566	3,539	728
1933	2,434,047	4,480	543	3,487	698
1934	2,295,566	4,289	535	3,370	644
1935—Stp. pit	130,084	96	1,355		
B. Ground	2,517,828	3,927	658	3,059	823
1936—Stp. pit	80,111	107	749		
B. Ground	2,761,120	4,112	671	3,243	851
1937—Stp. pit	80,116	79	1,014		
B. Ground	2,551,034	3,148	810	3,162	832
1938—Stp. pit	72,829	74	945		
B. Ground	2,380,434	3,573	667	2,846	801*
1939—Stp. pit	76,394	73	1,048		
B. Ground	2,372,805	3,636	653	2,900	818*
1940—Stp. pit	74,021	71	1,042		
B. Ground	2,463,184	3,556	692	2,844	866*
1941—Stp. pit	88,142	63	1,399		
B. Ground	2,625,112	3,427	766	2,745	856*
1942—Stp. pit	119,615	67	1,785		
B. Ground	3,093,496	3,485	888	2,777	1,114*
1943—Stp. pit	137,307	78	1,760		
B. Ground	3,278,730	4,016	816	3,133	1,046*
1944—Stp. pit	366,862	263	1,395		
B. Ground	2,779,939	3,565	882	2,826	984*

*See note over page.

NOTE: Alberta Coals have been re-classified and Domestic Coal is now included in the new headings "Bituminous" and "Sub-Bituminous".

PER CAPITA PRODUCTION OF MINES IN THE SUB-BITUMINOUS COAL FIELD

Year	Gross tons of coal mined	Total average No. of men employed	Tons of coal mined per man employed	Average No. of men employed under-ground	Tons of coal mined per man employed under-ground
1922—Stp. pit	367,514	217	1,692		
B. Ground	179,550	403	445	277	648
1923—Stp. pit	288,467	190	1,513		
B. Ground	174,994	354	494	260	673
1924—Stp. pit	369,724	211	1,782		
B. Ground	222,222	393	565	278	799
1925—Stp. pit	335,993	162	2,074		
B. Ground	245,842	461	533	326	754
1926—Stp. pit	258,964	147	1,761		
B. Ground	231,407	443	545	305	758
1927—Stp. pit	304,584	194	1,583		
B. Ground	290,606	478	608	321	905
1928—Stp. pit	394,682	179	2,205		
B. Ground	345,810	643	536	457	756
1929—Stp. pit	319,764	163	1,962		
B. Ground	348,344	585	595	402	866
1930—Stp. pit	304,144	157	1,937		
B. Ground	299,187	569	526	390	767
1931—Stp. pit	280,251	161	1,803		
B. Ground	191,138	486	393	336	569
1932—Stp. pit	348,266	177	1,862		
B. Ground	211,213	491	430	341	619
1933—Stp. pit	309,365	170	1,820		
B. Ground	244,776	516	474	370	661
1934—Stp. pit	302,054	158	1,912		
B. Ground	235,488	482	489	326	722
1935—Stp. pit	287,970	180	1,600		
B. Ground	278,466	501	830	337	826
1936—Stp. pit	263,899	175	1,508		
B. Ground	302,587	532	569	360	841
1937—Stp. pit	229,747	149	1,542		
B. Ground	276,782	504	549	348	795
1938—Stp. pit	227,317	148	1,536		
B. Ground	261,593	633	772	327	800*
1939—Stp. pit	246,459	142	1,735		
B. Ground	265,646	494	538	320	830*
1940—Stp. pit	318,425	241	1,321		
B. Ground	280,261	393	713	328	854*
1941—Stp. pit	320,801	272	1,179		
B. Ground	264,652	384	689	248	1,069*
1942—Stp. pit	332,748	191	1,742		
B. Ground	400,799	521	769	342	1,172*
1943—Stp. pit	351,890	360	967		
B. Ground	440,062	442	996	399	1,102*
1944—Stp. pit	280,420	161	1,742		
B. Ground	449,007	589	973	386	1,163*
1945—Stp. pit	833,129	330	2,525		
B. Ground	2,367,356	2,915	812	2,379	991*
1946—Stp. pit	831,505	316	2,631		
B. Ground	2,603,354	3,066	849	2,513	1,036
1947—Stp. pit	709,704	339	2,094		
B. Ground	2,527,516	3,183	794	2,859	884

*See Note.

PER CAPITA PRODUCTION OF MINES IN THE BITUMINOUS COAL FIELD

Year	Gross tons of coal mined	Total average No. of men employed	Tons of coal mined per man employed	Average No. of men employed underground	Tons of coal mined per man employed underground
1910	1,896,961	2,981	636	2,076	914
1911	649,745	2,645	246	1,820	357
1912	1,926,371	3,243	594	2,353	818
1913	2,374,401	3,562	666	2,645	897
1914	1,953,367	3,529	553	2,632	742
1915	1,626,237	2,921	557	2,103	773
1916	2,335,259	3,142	743	2,258	1,034
1917	2,206,868	3,335	661	2,429	909
1918	2,982,334	3,686	820	2,597	1,109
1919	2,325,787	3,118	745	2,100	1,108
1920	3,410,021	4,228	809	2,711	1,202
1921	2,897,380	4,133	701	2,820	1,026
1922	2,214,273	3,034	729	2,084	1,062
1923	3,241,614	4,345	746	3,215	1,003
1924	1,515,107	2,171	698	1,574	966
1925	2,145,200	3,277	654	2,422	885
1926	2,858,508	3,375	847	2,550	1,121
1927	2,984,419	3,682	810	2,757	1,082
1928	3,215,481	3,862	832	2,468	1,302
1929	3,093,393	3,880	797	2,898	1,077
1930	2,278,490	3,341	682	2,461	926
1931	1,846,357	3,023	611	2,214	834
1932	1,733,720	2,621	660	1,092	916
1933	1,726,596	2,876	600	2,080	830
1934	1,915,740	2,934	653	2,113	907
1935	2,248,625	3,096	726	2,248	1,000
1936	2,288,658	3,184	719	2,337	979
1937	2,414,003	3,156	765	2,295	1,052
1938	2,287,840	3,131	731	2,254	1,015
1939	2,556,801	3,111	822	2,297	1,113
1940	3,069,197	3,155	972	2,354	1,303
1941	3,671,357	3,568	1,029	2,659	1,381
1942	3,807,619	3,766	1,008	2,746	1,387
1943	3,469,993	3,740	927	2,665	1,302
1944—Stp. pit	119,092	35	3,403		
B. Ground	3,432,113	3,762	935	2,655	1,293
1945—Stp. pit	491,736	209	2,364		
B. Ground	4,109,027	4,825	852	3,373	1,218
1946—Stp. pit	991,335	332	2,986		
B. Ground	4,398,261	4,869	903	3,384	1,300
1947—Stp. pit	1,170,875	405	2,891		
B. Ground	3,666,501	4,845	757	3,231	1,135

PER CAPITA PRODUCTION OF MINES IN THE ANTHRACITE COAL FIELD

Year	Gross tons of coal mined	Total average No. of men employed	Tons of coal mined per man employed	Average No. of men employed underground	Tons of coal mined per man employed underground
1910	261,785	530	493	338	774
1911	80,119	500	160	209	383
1912	178,589	438	407	225	793
1913	168,720	489	345	263	641
1914	170,971	422	405	230	745
1915	125,732	343	366	180	698
1916	140,544	296	474	141	996
1917	118,717	284	418	129	920
1918	131,225	286	458	124	1,058
1919	85,616	229	374	95	901
1920	130,594	287	455	117	1,116
1921	96,674	284	341	127	761
1922	40,417	112	361	41	986
1923	107	69	1	9	12

NOTE.—The table showing the number of men employed in the Anthracite Coal Field, includes employees at the briquetting plant. There has been no anthracite coal produced since 1923.

*Calculating the total per capita production for men employed underground, the tonnage mined from stripping pits was deducted and only the tonnage produced from mines was used.

It will also be noted that the tonnage used in the above and following tables does not include tonnage extracted under permit.

NOTE.—Previous to 1944 there was no coal mined in the Bituminous Field by stripping methods.

PER CAPITA PRODUCTION OF MINES BY AREAS:

BITUMINOUS COAL FIELD

Areas	Strip and Underground Mining			Strip Mining			Underground Mining		
	Gross tons of coal mined	Total average No. of men employed	Tons of coal mined per man employed	Gross tons of coal mined	Average No. of men employed	Tons of coal mined per man employed	Gross tons of coal mined	Average No. of men employed	Tons of coal mined per man employed
Group 1:									
Cascade	280,769	299	939				280,769	299	939
Nordegg	343,720	388	886	108,139	24	451	235,581	364	647
Group 2:									
Crowsnest	1,967,880	2,243	877	256,429	94	2,728	1,711,451	2,149	796
Mountain Park	954,949	856	1,116	439,477	123	3,736	495,472	733	676
Group 3:									
Coalspur	754,775	675	1,118	346,118	149	2,324	408,657	526	777
Haicourt	1,017	4	254	414	3	138	603	1	603
Lethbridge	462,322	628	736				462,322	628	737
Morley	1,738	3	579				1,738	3	579
Fekisko	3,389	5	678	159	1	159	3,230	4	808
Pincher	681	3	227				681	3	227
Saunders	65,342	128	510				65,342	128	510
Prairie Creek	655	7	94				655	7	94
No Area	139	11	13	139	11	13			
Total	4,837,376	5,250	940	1,170,875	405	2,891	3,666,501	4,845	757

THE MINES BRANCH

Number of days on which Coal was drawn in the BITUMINOUS FIELD by areas during each month:

Areas	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Group 1:													
Cascade	23.5	21.0	22.5	22.0	23.0	22.5	18.5	21.0	22.0	23.0	21.5	22.5	263.0
Nordegg	15.0	10.0	14.0	19.0	19.0	20.0	20.0	20.0	18.0	18.0	19.0	20.0	212.0
Group 2:													
Crowsnest	20.4	12.6	17.7	18.3	17.9	18.1	18.4	18.4	17.9	19.4	19.4	20.1	216.5
Mountain Park	14.8	17.5	20.0	20.0	21.0	19.0	21.0	21.0	22.0	16.0	19.3	19.5	233.1
Group 3:													
Coalspur	20.6	20.0	20.6	18.8	20.8	20.0	18.0	18.0	20.6	20.2	20.6	21.0	240.0
Halcourt	16.2	19.8	12.0	12.0	20.0	11.0	22.0	23.0	23.0	23.0	21.0	19.0	167.0
Lethbridge	20.0	16.7	16.4	18.8	20.0	18.8	16.4	17.6	20.2	18.5	18.5	18.1	220.0
Morley	21.0	20.0	22.0	10.0	5.0	10.0	10.0	21.0	22.0	22.0	19.0	21.0	198.0
Pekisko	5.0	5.0	5.0	13.0	5.0	16.0	16.0	23.0	22.0	20.0	20.0	20.0	166.5
Pincher	12.5	9.0	7.0	10.0	9.0	14.0	14.0	9.0	.....	18.5	19.0	17.0	133.0
Prairie Creek	25.0	20.0	10.0	19.0	9.0	15.0	15.0	26.0	24.0	8.0	17.0	15.0	198.0
Saunders	19.5	20.0	21.0	21.0	22.0	15.0	.....	21.0	21.0	22.0	19.0	20.5	243.0
No Area	6.0	..	15.0	..	.....	.....	.....	.....	.....	.....	.....	.....	21.0
Total	16.8	15.8	15.6	17.3	16.3	16.2	17.1	19.9	22.0	19.1	19.4	19.2	210.0

THE MINES BRANCH

Total number of shifts worked above and below ground by areas during each month for the six months ending June 30, 1947:

BITUMINOUS FIELD

Areas	January		February		March		April		May		June		Total Jan. to June	
	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground
Group 1:														
Cascade	2,870	3,409	2,531	3,042	2,702	3,163	2,757	3,189	3,127	3,232	3,092	3,069	17,079	19,104
Nordeg	4,032	3,389	3,174	2,380	3,572	3,353	2,480	3,803	3,706	3,698	4,095	3,606	21,059	20,229
Group 2:														
Crowsnest	13,999	32,468	10,406	21,308	13,400	29,947	14,174	30,306	14,110	29,312	13,768	28,533	79,857	171,874
Mountain Park	7,016	9,947	6,139	8,966	7,014	10,015	8,478	9,349	8,998	9,506	9,761	9,027	47,406	56,810
Group 3:														
Coalspur	9,321	6,682	8,479	6,265	9,046	6,586	7,486	5,930	8,140	6,024	7,743	6,147	50,215	37,634
Halcourt	95	72	97	58	30	14	14	8,490	3,064	8,164	3,298	11	222	155
Lethbridge	3,655	10,236	3,242	8,846	3,604	9,234	3,130	8,490	3,064	8,164	3,298	7,508	19,993	52,478
Morley	21	49	...	60	22	44	22	25	10	...	10	10	75	188
Pekisko	5	...	5	...	5	...	26	91	10	15	25	65	76	171
Pincher	35	55	22	44	21	42	20	20	...	20	...	18	98	199
Prairie Creek	166	143	43	68	84	54	12	7	36	27	40	30	381	329
Saunders	844	1,980	842	2,091	842	2,125	756	1,760	788	1,624	776	1,867	4,848	11,447
No Area	48	...	...	...	106	...	...	...	...	...	...	...	154	154
Total	42,107	68,430	34,980	53,128	40,448	64,577	39,341	62,970	41,979	61,622	42,608	59,891	241,463	370,618

Total number of shifts worked above and below ground by areas during each month for the six months ending December 31, 1947:

BITUMINOUS FIELD

Areas	July		August		September		October		November		December		Total July to Dec.		Total for year 1947	
	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground
Group 1:																
Cascade	3,127	3,048	3,006	3,247	2,887	3,198	3,169	3,380	2,619	3,122	2,887	3,284	17,695	19,279	34,774	38,383
Nordegg	4,084	3,253	3,873	3,085	3,884	3,076	3,963	2,996	4,067	3,336	4,086	3,460	23,957	19,206	45,016	39,435
Group 2:																
Crowsnest	14,069	25,555	15,072	26,342	14,664	27,449	16,005	28,199	14,711	26,682	15,297	28,778	89,818	163,005	169,675	334,879
Mountain Park	10,964	8,664	10,874	8,716	11,762	8,453	10,653	8,022	10,335	8,864	9,862	8,824	64,470	51,543	111,876	108,353
Group 3:																
Coalspur	6,962	5,925	7,233	5,744	8,161	5,946	8,445	6,201	7,913	5,876	7,998	6,146	46,712	35,838	96,927	73,472
Halcourt	22	22	23	23	33	33	46	46	20	11	60	18	80	120	302	275
Lethbridge	2,637	5,647	3,011	7,527	3,331	8,180	3,479	8,620	3,308	8,214	3,581	9,477	19,347	47,663	39,340	100,143
Morley	10	20	21	42	7	44	1	44	38	38	20	42	39	230	134	418
Pekisko	32	66	23	110	22	22	20	20	20	140	20	140	137	498	213	669
Pincher	28	28	18	18	74	74	74	74	48	38	59	34	421	192	98	391
Prairie Creek	20	15	100	28	146	48	54	54	48	102	74	74	421	273	802	602
Saunders	560	1,189	753	1,481	744	1,618	780	1,729	687	1,694	794	1,903	4,318	9,614	9,166	21,061
No Area .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	154	.....
Total	42,485	53,432	43,966	56,363	45,608	57,986	46,563	59,385	43,728	58,117	44,664	62,180	267,014	347,463	508,477	718,081

THE MINES BRANCH

Total number of shifts worked above and below ground by areas during each month, for the six months ending June 30, 1947:

Areas		January		February		March		April		May		June		Total Jan. to June	
		Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground	Above Ground	Below Ground
Group 4:															
Ardley	169	120	167	98	35	40	20	5	3	10	4	394	277	596	1,785
Big Valley	133	457	169	474	166	381	65	212	36	155	106	27	106	5,653	6,224
Brooks	1,007		696		500		988		1,248			1,274		2,213	1,76
Carbon	433	1,530	392	1,428	318	1,135	512	797	285	661	673	253	18	176	1,354
Champion	44	281	391	331	32	258	13	188	28	120	120	18	32,082	51,620	195,103
Drumheller	10,358	36,458	8,250	30,432	8,861	32,682	8,088	32,588	7,810	30,901	8,213	8,213	5,568	14,257	49,353
Edmonton	3,470	12,522	2,954	11,194	3,032	8,341	1,797	6,298	1,650	5,430	1,314	49	301	487	2,975
Gleichen	126	867	130	854	87	302	50	288	45	193	131	552	213	4,802	4,964
Milk River	112	26	19	21	747	937	254	632	1,044	597	315	315	213	1,987	271
Pembina	1,901	1,145	541	1,101	766	33	36	16		145	96				
Taber	1,303	231	35	60		42									
Wetaskiwin		57													
Whitecourt															
Group 5:															
Camrose	1,029	1,050	753	998	581	742	396	539	364	577	379	338	379	3,461	4,285
Castor	693	1,342	624	1,275	286	835	19	284	23	203	142	25	142	1,670	4,081
Pakowki	18	20	20	116	40	95	24	151	32	157	49	49	230	183	817
Redcliff	209	60	171	80	107	54	29	€	18	3	27	27	4	561	207
Rochester	520	465	475	465	54	498	498	€	651	3	238	238	4	2,847	207
Sheerness	2,086	185	1,665	152	1,275	108	690	690	807	6	961	961	6	7,484	465
Tofield	69													69	
Westlock															
Total	23,700	56,399	17,122	48,802	17,298	46,191	13,479	42,239	14,044	39,158	40,532	13,101	40,532	98,744	273,321
SUMMARY															
Bituminous	42,107	68,430	34,980	53,128	40,448	64,577	39,841	62,970	41,979	61,622	59,891	42,608	59,891	241,463	370,618
Sub-Bituminous	23,700	56,399	17,122	48,802	17,298	46,191	13,479	42,239	14,044	39,158	40,532	13,101	40,532	98,744	273,321
Total	65,807	124,829	52,102	101,930	57,746	110,768	52,820	105,209	56,023	100,780	100,423	55,709	100,423	340,207	643,939

THE MINES BRANCH

AMOUNT OF MINE TIMBER USED DURING THE YEAR

BITUMINOUS COAL FIELD

Areas	Timber, lineal feet	Lumber, B.M. feet	Ties, lineal feet	Slabs, cords	Lagging, lineal feet
Group 1:					
Cascade	289,949				9,220
Nordegg	784,142				
Group 2:					
Crowsnest	3,806,071	1,357,069		1,903,937	
Mountain Park	865,269	335,827		394	
Group 3:					
Coalspur	596,219				
Halcourt	2,725				
Lethbridge	1,598,154	67,131	484,000	7	
Morley	7,500				
Pekisko	7,000				
Pincher	1,000				
Prairie Creek	2,400				
Saunders	276,336		92,000		64,784
No Area	500				
Total	8,237,265	1,760,027	576,000	1,904,338	74,004

SUB-BITUMINOUS COAL FIELD

Group 4:					
Ardley	9,400				
Big Valley	78,317				
Carbon	170,947			37,000	
Champion	19,380				
Drumheller	8,146,413		299,400	187	
Edmonton	2,087,224		31,624		50
Gleichen	71,459				
Milk River	4,600				
Pembina	208,807				
Taber	21,600				
Wetaskiwin	64,000				
Group 5:					
Camrose	122,000				
Castor	121,978				
Redcliff	20,133				
Sheerness	1,350				
Tofield	18,400				
Total	11,166,008		331,024	37,187	50

PARTICULARS OF LAMPS IN THE BITUMINOUS AND SUB-BITUMINOUS COAL
FIELDS DURING THE YEARS 1946 AND 1947

BITUMINOUS

	1946	1947
Portable Electric Lamps, Edison Cap Type	4,062	4,023
Wolfe Flame Type	267	353
Total	4,429	4,376

SUB-BITUMINOUS

Portable Electric Lamps, Edison Cap Type	1,841	2,015
Portable Electric Lamps, Wheat Cap Type	30	24
Wolfe Flame Type	171	167
Koehler Flame Type	40	17
Total	2,056	2,223

QUANTITY OF EXPLOSIVES USED IN POUNDS FOR BLASTING COAL:
BITUMINOUS COAL FIELD

Areas	Names of Explosives									Total
	Pellets	Monobel No. 4	Monobel No. 14	CXL-ITE	Cardox	Monobel No. 7	Monobel No. 6	Monobel No. 10	Forcite	
Group 1: Cascade		61,050	350			550				61,950
Group 2: Crownsnest		72,964	5,925		3,118	50				82,057
Mountain Park							42,774		8,300	51,074
Group 3: Coalspur		87,552							66,950	154,502
Halcourt	78									78
Lethbridge	1,714	24,026	22,235	50	43,030		50	2,175		93,250
Morley			700							700
Pekisko			1,900							1,900
Pincher		100								100
Prairie Creek			750							750
Saunders	4,600		10,651							15,251
No Area				100						100
Total	6,392	245,692	42,511	150	46,118	600	42,824	2,175	75,250	461,712

SUB-BITUMINOUS COAL FIELD

Areas	Names of Explosives					Total
	Pellets	Monobel No. 4	Monobel No. 14	CXL-ITE	Cardox	
Group 4: Ardley		2,490				2,940
Big Valley		1,680				2,330
Brooks		17,040	260			17,300
Carbon					2,028	2,028
Champion		2,850				2,850
Drumheller		115,761	4,626	74,916	1,300	264,503
Edmonton		1,829	11,775	47,967	100	61,671
Gleichen		4,850		100		4,950
Milk River		600				600
Pembina		100	2,350	2,721		5,171
Taber		9,425	1,500			10,925
Wetaskiwin		400		250		650
Group 5: Camrose		20		4,650		4,670
Castor		11,630		550		12,180
Redcliff		1,785				1,785
Richester		300		46		346
Sheerness		1,497		5		1,502
Tofield		12,900		1,220	1,800	15,920
Westlock				35		35
Total		185,517	20,511	135,588	3,200	412,356

Number of tons of coal produced per pound of Explosives used for blasting coal:

BITUMINOUS COAL FIELD

Areas	Number of tons of coal mined	Number of pounds of explosive used	Tons of coal mined per pound of explosive used
Group 1:			
Cascade	280,769	61,950	4.53
Nordegg	343,720		
Group 2:			
Crowsnest	1,967,880	82,057	23.98
Mountain Park	954,949	51,074	18.69
Group 3:			
Coalspur	754,775	154,502	4.88
Halcourt	1,017	78	13.03
Lethbridge	462,322	93,250	4.96
Morley	1,738	700	2.48
Pekisko	3,389	1,900	1.78
Pincher	681	100	6.81
Saunders	65,342	15,251	4.28
Prairie Creek	139	100	1.39
No Area	655	750	.87
Total	4,837,376	461,712	10.47

SUB-BITUMINOUS COAL FIELD

Group 4:			
Ardley	15,368	2,940	5.23
Big Valley	14,230	2,330	6.10
Brooks	134,643	17,300	7.78
Carbon	70,159	2,028	34.59
Champion	8,296	2,850	2.91
Drumheller	1,857,416	264,503	7.02
Edmonton	493,133	61,671	7.99
Gleichen	14,940	4,950	3.02
Milk River	1,605	600	2.67
Pembina	95,468	5,171	18.46
Taber	128,376	10,925	11.75
Wetaskiwin	1,385	650	2.13
Whitecourt	231		
Group 5:			
Camrose	83,512	4,670	17.88
Castor	72,058	12,180	5.92
Pakowki	16		
Redcliff	8,603	1,785	4.81
Rochester	5,748	346	16.61
Sheerness	54,194	1,502	36.08
Tofield	177,120	15,920	11.12
Westlock	719	35	20.54
Total	3,237,220	412,356	7.85

Estimated number of shots fired for blasting coal:

BITUMINOUS COAL FIELD

Areas	Electric Deton- ators	Electric Squibs	Cardox Heaters	Total
Group 1:				
Cascade	88.100			88.100
Group 2:				
Crowsnest	88.460		3.118	91.578
Mountain Park	52.245			52.245
Group 3:				
Coalspur	70.643			70.643
Halcourt	135			135
Lethbridge	78.194	1,160	10.931	90.285
Morley	1.200			1,200
Pekisko	2.010			2,010
Pincher	200			200
Prairie Creek	1,300			1,300
Saunders	14.063			14.063
No Area	150			150
Total	396.700	1.160	14.049	411.909

SUB-BITUMINOUS COAL FIELD

Group 4:				
Ardley	250	1,420		1,670
Big Valley		1,500		1,500
Brooks	1,500	10,300		11,800
Carbon	1,741	10,640		12,381
Champion	1,970	850		2,820
Drumheller	166,803	90,822	16,950	274,575
Edmonton	90,075	2,600		92,675
Gleichen	350	3,550		3,900
Milk River		900		900
Pembina	6,183			6,183
Taber	6,920	7,690		14,610
Wetaskiwin		550		550
Group 5:				
Camrose	5,970	180		6,150
Castor	150	7,967		8,117
Redcliff	2,187			2,187
Rochester	329			329
Sheerness	1,085	384		1,469
Tofield	6,950	3,151		10,101
Westlock	76			76
Total	292,539	142,504	16,950	451,993

THE MINES BRANCH

Number of miss-fire shots recorded in blasting coal in the Province:

BITUMINOUS COAL FIELD

Areas	Electric Detonators	Electric Squibs	Cardox Heaters	Total
Group 1: Cascade	1			1
Group 2: Crowsnest	5			5
Mountain Park	11			11
Group 3: Lethbridge	340	1		341
Saunders	3			3
Total	360	1		361

SUB-BITUMINOUS COAL FIELD

Group 4:				
Ardley		8		8
Big Valley		2		2
Brooks	11	14		25
Carbon		11		11
Champion	7	2		9
Drumheller	25	32	148	205
Edmonton	15			15
Pembina	5			5
Taber	2	4		6
Group 5:				
Camrose	4			4
Castor		5		5
Sheerness		3		3
Tofield	3	27		30
Total	72	108	148	328

Quantity of Explosives used in pounds for blasting rock in Coal-mines in the Province.

Areas	Names of Explosives								Total
	Pellets	Polar Monobel No. 4	Polar Monobel No. 6	Polar Monobel No. 14	Dynamite 40%	Stopeite	CXL-ITE	Polar Forcite	
Carbon				100			300		400
Cascade							3,900		3,900
Coalspur							1,304	17,300	18,604
Crowsnest					11,115		22,713	13,465	47,293
Drumheller		1,650		2,345			21,953		25,948
Edmonton				716			2,150		2,866
Gleichen				25					25
Lethbridge		100					50		150
Mountain Park			2,150				7,506	80,814	90,470
Nordeg							272		272
Pekisko				30					30
Pembina				46					46
Saunders	90			1,700					1,790
Sheerness						100			100
Taber		600					1,600		2,200
Total	90	2,350	2,150	4,962	11,115	100	61,748	111,579	194,094

Estimated number of shots fired for blasting rock in Coal-mines in the Province:

Areas	Electric Deton- ators	Total
Carbon	485	485
Cascade ..	8,500	8,500
Coalspur ..	3,282	3,282
Crowsnest ..	20,445	20,445
Drumheller ..	43,722	43,722
Edmonton ..	2,412	2,412
Gleichen ..	50	50
Lethbridge ..	195	195
Mountain Park ..	16,911	16,911
Nordegg ..	613	613
Pekisko ..	15	15
Pembina ..	112	112
Saunders ..	1,804	1,804
Sheerness ..	100	100
Taber ..	3,410	3,410
Total ..	102,056	102,056

Number of miss-fire shots recorded in blasting rock in Coal-mines in the Province:

Crowsnest ..	15	15
Drumheller ..	1	1
Edmonton ..	1	1
Mountain Park ..	1	1
Total ..	18	18

THE MINES BRANCH

ELECTRICITY

The rules for the installation and use of electricity in or about mines require a return to be made to the Department on or before January 15th of each year, giving size, type and any other particulars which may be required of electrical apparatus in use above and below ground. According to the returns received from the different mines, electricity was used in 83 mines in 1947. A summary of these returns regarding the horse-power of electrical apparatus in use is given below.

Areas	No. of mines using Elec- tricity	Horse-power of electrical apparatus in use		Total Horse-power	Purchased Power
		Above Ground	Below Ground		
Big Valley	1	28	35	63	26.640
Brooks	1	80		80	
Camrose	2	134	35	169	99.500
Carbon	7	122	23	145	105.820
Cascade	1	2,138	100	2,238	3,673.940
Castor	4	150	22	172	22.480
Coalspur	5	1,900	828	2,728	
Crowsnest	6	20,442	3,080	23,522	26,100.701
Drumheller	20	4,105	6,447	10,556	7,737.867
Edmonton	14	913	1,564	2,477	1,326.418
Gleichen	1	4	30	34	12.530
Lethbridge	4	2,135	1,630	3,765	3,025.400
Mountain Park	4	4,052	940	4,992	
Nordegg	2	3,406	109	3,515	5,392.800
Pekisko	1	6	17	23	
Pembina	1	45	65	110	
Redcliff	1	128	60	188	71.900
Saunders	2	115	108	223	166.400
Taber	3	189	30	219	43.201
Tofield	3	187	8	195	87.000
Total	83	40,279	15,131	55,410	47,892.597

COAL-CUTTING MACHINERY

Areas	No. of machines operated by		Tons of coal mined by	
	Elec- tricity	Com- pressed air	Elec- tricity	Com- pressed air
Big Valley	1	Picks	2	12,110
Camrose	2	.....	4	28,000
Carbon	6	.....	4	42,534
Cascade		45	6	48,116
Castor	3	.....	2	7,897
Champion .....		.....	1	2,525
Coalspur .....		.....	34	2,277
Crowsnest	1	246	5	375.648
Drumheller	96	.....		1,210
Edmonton	28	.....	3	174,456
Gleichen	1	.....		391,287
Lethbridge	22	.....		5,490
Milk River .....		.....	1	457,391
Pembina	1	.....	3	.....
Redcliff	2	.....		52,362
Saunders .....		.....	9	8,557
Taber	1	.....	1	65,339
Tofield	2	.....		7,000
Total	166	291	71	2,762,394
				1,503,233

ACCIDENTS

Summary table showing Accidents occurring in Mines from 1906 to 1947 inclusive, reportable under The Coal Mines Regulation Act.

Year	Output	Accidents			Tons of coal mined per accident		
		Fatal	Serious	Slight	Fatal	Serious	Slight
1906	1,385,000	10	11	20	138,500	126,909	60,250
1907	1,834,745	19	18	68	96,565	101,930	26,981
1908	1,845,000	11	38	13	167,727	48,552	141,923
1909	2,174,329	9	42	18	241,952	51,769	120,796
1910	3,036,757	61a	41	58	49,782	71,067	52,375
1911	1,694,564	7	32	45	242,080	52,955	37,658
1912	3,446,349	21	38	58	164,111	90,693	59,419
1913	4,306,346	28	60	83	152,789	71,772	51,883
1914	3,821,739	209b	44	50	18,286	86,857	76,434
1915	3,434,891	18	33	33	190,827	104,087	104,087
1916	4,638,604	20	51	34	232,430	91,149	136,723
1917	4,863,414	24	62	39	202,642	78,442	124,703
1918	6,148,620	22	60	77	279,483	102,477	79,860
1919	5,022,412	21	56	54	239,162	89,685	93,008
1920	6,908,923	29	53	38	238,733	130,371	181,814
1921	5,937,195	21	64	25	282,721	92,769	237,488
1922	5,976,432	35	38	35	170,755	157,274	170,755
1923	6,866,923	22	44	10	312,133	156,066	686,692
1924	5,203,713	21	42	40	247,796	123,898	130,093
1925	5,883,394	30	59	56	196,113	99,718	105,060
1926	6,508,908	39c	67	119	166,398	97,148	54,696
1927	6,936,780	26	76	115	266,799	91,273	60,320
1928	7,334,179	28	71	122	261,935	103,298	60,166
1929	7,147,250	31	69	98	230,556	103,583	72,931
1930	5,755,911	11	69	97	523,265	83,419	59,339
1931	4,563,309	16	75	73	285,207	60,844	62,511
1932	4,867,984	11	61	96	442,544	79,803	50,708
1933	4,714,784	6	60	109	785,797	78,580	43,255
1934	4,748,848	15	68	70	316,589	69,836	67,840
1935	5,462,973	35d	66	113	156,085	82,772	48,352
1936	5,696,375	11	79	101	517,852	72,106	56,400
1937	5,551,682	20	72	73	277,584	77,107	76,050
1938	5,230,025	21e	72	135	249,040	72,639	38,741
1939	5,518,105	17	57	180	324,594	96,809	30,657
1940	6,205,088	13	79	97	477,314	78,545	63,970
1941	6,970,064	48f	78	142	145,209	89,360	49,084
1942	7,754,279	17	92	148	456,134	84,285	52,393
1943	7,677,982	25g	73	152	307,119	105,178	50,513
1944	7,427,433	10	70	125	742,743	106,106	59,419
1945	7,801,248	23h	51	168	339,185	154,925	46,436
1946	8,824,455	12	76	128	735,371	116,111	68,941
1947	8,074,596	15	121	117	538,306	66,732	69,014
Total	225,201,608	1,088	2,488	3,432	206,987	90,515	65,618

a. Including thirty-one deaths caused by the Bellevue Explosion.

b. Including one hundred and eighty-nine deaths caused by the Hillcrest Explosion.

c. Including ten deaths caused by the McGillivray Creek Coal & Coke Co., Ltd. Explosion, and two deaths caused by an explosion at the Hillcrest Collieries, Ltd., at Hillcrest.

d. Including sixteen deaths caused by the explosion at the Lethbridge Collieries Ltd., at Coalhurst.

e. Including five deaths caused by the explosion at Hinton Collieries, Limited, Hinton.

f. Including four deaths caused by an explosion at North American Collieries, Ltd., Western Crown Mine, and twenty-nine deaths caused by an explosion at Brazeau Collieries, Ltd., Nordegg.

g. Including four deaths caused by an explosion at the Kerralta Coal Co., Lethbridge.

h. Including seven deaths caused by an explosion at Luscar Coals, Ltd., Luscar.

THE MINES BRANCH

ACCIDENTS DURING 1947, CLASSIFIED ACCORDING TO THE COAL FIELDS
IN WHICH THEY OCCURRED

Year	Output	Accidents			Tons of coal mined per accident		
		Fatal	Serious	Slight	Fatal	Serious	Slight
Bituminous	4,837,376	11	70	63	439,767	69,105	76,784
Sub-Bituminous	3,237,220	4	51	54	809,305	63,475	59,948
Total	8,074,596	15	121	117	538,306	66,732	69,014

COMPARISON OF PROTECTIVE CLOTHING USED FOR THE YEARS 1945, 1946
AND 1947

	1945	1946	1947
Hard Hats	4,673	4,898	5,214
Safety Shoes, pairs	3,891	2,704	3,291
Goggles, pairs	687	877	608
Knee Pads, pairs	238	268	299

Comparison of Accidents per 1,000,000 tons and per 1,000 men employed, 1915-1947.

Year	Tonnage	Total No. of men employed	Fatal Accidents			Serious Accidents			Slight Accidents			Total		
			No.	Per 1,000,000 tons	Per 1,000 men employed	No.	Per 1,000,000 tons	Per 1,000 men employed	No.	Per 1,000,000 tons	Per 1,000 men employed	No.	Per 1,000,000 tons	Per 1,000 men employed
1915	3,434,891	6,445	18	5.24	2.79	33	9.63	5.12	33	9.63	5.12	84	24.45	13.03
1916	4,538,604	7,570	20	4.31	2.64	51	10.99	6.74	34	7.33	4.49	105	22.61	13.87
1917	4,863,414	8,310	22	4.53	2.88	62	12.75	7.46	39	8.02	4.69	125	25.91	15.04
1918	6,148,620	8,774	24	3.57	2.51	60	9.95	6.84	77	12.52	7.78	159	25.85	18.12
1919	5,022,412	7,573	21	4.18	2.78	56	11.15	7.39	54	10.75	7.13	131	26.28	17.30
1920	6,908,923	8,688	29	4.20	2.99	53	7.81	6.10	38	5.50	4.37	120	17.37	13.81
1921	5,937,195	10,010	31	3.54	2.10	64	10.78	6.39	25	4.23	2.50	110	18.52	10.99
1922	5,976,432	8,547	35	5.86	4.09	38	6.36	4.45	35	5.86	4.09	108	18.07	12.61
1923	6,866,923	9,927	22	3.19	2.21	44	6.39	4.43	10	1.45	1.00	76	19.07	12.61
1924	5,203,713	7,317	21	4.03	2.86	42	8.07	5.74	40	7.68	5.27	103	19.70	14.55
1925	5,883,394	8,774	30	5.10	3.40	59	10.03	3.42	56	9.52	6.78	145	24.65	16.53
1926	6,508,908	8,763	39	5.99	4.99	67	10.29	7.65	119	10.23	13.58	225	34.57	25.68
1927	6,936,780	9,016	26	3.75	2.88	76	10.96	8.43	115	16.50	12.58	217	31.28	24.06
1928	7,334,179	9,496	28	3.82	2.96	71	9.68	7.48	122	12.65	12.85	223	30.12	23.27
1929	7,147,250	9,572	31	4.34	3.24	69	9.65	7.21	98	12.71	10.24	198	27.70	20.30
1930	5,755,911	8,889	11	1.91	1.24	69	11.99	7.76	97	17.20	10.90	177	30.75	19.91
1931	4,563,309	8,070	16	3.51	1.98	75	16.44	9.27	73	16.00	9.04	164	35.92	20.32
1932	4,867,984	7,837	11	2.26	1.40	61	12.53	7.78	96	19.72	12.23	168	34.51	21.43
1933	4,714,784	8,042	6	1.27	1.25	60	12.73	7.46	109	20.99	13.55	175	37.12	21.76
1934	4,748,848	7,863	15	3.14	1.91	68	12.31	8.65	70	14.74	8.90	153	32.21	19.45
1935	5,462,973	7,824	35d	6.40	4.47	66	12.08	8.44	113	20.68	14.34	214	39.17	27.35
1936	5,696,375	8,110	11	1.93	1.36	79	13.87	9.74	101	17.73	12.45	191	33.53	23.55
1937	5,531,683	7,836	20	3.60	2.55	72	12.97	9.19	73	13.15	9.32	165	29.72	21.06
1938	5,230,025	7,411	21e	3.08	2.63	72	13.76	9.71	135	25.81	18.21	228	43.53	30.76
1939	5,518,105	7,456	17	2.40	1.56	57	10.33	7.61	180	32.60	24.14	254	46.03	34.06
1940	6,205,088	7,416	13	2.10	1.53	79	12.73	10.65	97	15.67	13.08	189	30.46	25.48
1941	6,970,064	7,714	48f	6.80	6.22	78	11.19	10.11	142	20.37	18.41	268	38.73	34.74
1942	7,754,279	8,040	17	2.11	1.58	92	11.86	11.44	148	19.09	18.40	257	32.14	31.95
1943	7,677,982	8,636	25g	3.26	2.89	73	9.51	8.45	152	19.80	17.60	250	32.56	28.95
1944	7,427,433	8,375	10	1.34	1.19	70	9.42	8.35	125	16.83	14.92	205	27.60	24.47
1945	7,801,248	8,309	23	2.93	2.76	51	6.53	6.13	168	21.53	20.24	242	31.02	29.12
1946	8,294,458	8,583	12	1.36	1.39	76	8.61	8.85	128	14.50	14.91	216	24.47	25.16
1947	8,074,586	8,772	15	1.86	1.71	121	14.98	13.79	117	14.49	13.33	253	31.33	28.81

c. Including 10 deaths by explosion at McGillivray Creek Coal & Coke Co., Ltd., Coleman, and two deaths caused by an explosion at the Hillcrest Collieries, Ltd., Hillcrest.

d. Including 16 deaths by explosion at Lethbridge Collieries Ltd., Coalhurst.

e. Including 5 deaths by explosion at Hinton Collieries Ltd., Hinton.

f. Including 4 deaths by explosion at North American Collieries, Ltd., East Coulee, and 29 deaths by explosion at Brazeau Collieries, Ltd., Nordegg.

g. Including four deaths caused by an explosion at the Kerralta Coal Co., Lethbridge.

*Output does not include coal produced by farmers under permit

THE MINES BRANCH

Number of tons produced per accident:

BITUMINOUS COAL FIELD

Areas	Output	Average No. of men employed	No. of tons produced per accident			
			Fatal	Serious	Slight	Total
Group 1:						
Cascade	280,769	299		40,110	280,769	35,096
Nordegg	343,720	388	114,573	171,860	57,287	31,247
Group 2:						
Crowsnest	1,967,880	2,243	655,960	49,197	78,715	28,939
Mountain Park	954,949	856	31,831	10,610	95,495	43,407
Group 3:						
Coalspur	754,775	675	377,387	377,387	94,347	62,897
Halcourt	1,017	4				
Lethbridge	462,322	628		51,369	38,527	22,015
Morley	1,738	3			1,738	1,738
Pekisko	3,389	5				
Pincher	681	3				
Prairie Creek	655	7				
Saunders	65,342	128		65,342		65,342
No Area	139	11				
Total	4,837,376	5,250	439,761	69,105	76,784	33,593

SUB-BITUMINOUS COAL FIELD

Group 4:						
Ardley	15,368	9				
Big Valley	14,230	28				
Brooks	134,643	70				
Carbon	70,159	91				
Champion	8,296	18				
Drumheller	1,857,416	2,214	619,139	43,196	46,435	21,598
Edmonton	493,133	620	493,133	61,642	35,224	21,441
Gleichen	14,940	34				
Milk River	1,605	5				
Pembina	95,468	96				
Taber	128,376	45				
Wetaskiwin	1,385	2				
Whitecourt	231	1				
Group 5:						
Camrose	83,512	85				
Castor	72,058	77				
High Prairie						
Pakowki	16	1				
Redcliff	8,603	13				
Rochester	5,748	6				
Sheerness	54,194	28				
Tofield	177,120	73				
Westlock	719	6				
Total	3,237,220	3,522	809,305	63,475	59,948	29,699

SUMMARY

Bituminous	4,837,376	5,250	439,761	69,105	76,784	33,593
Sub-Bituminous	3,237,220	3,522	809,305	63,475	59,948	29,699
Total	8,074,596	8,772	538,306	66,732	69,014	31,915

Classification of Accidents according to output of mines which produced during the year 1947:

	Under 1,000 tons	From 1,000 to 5,000 tons	From 5,000 to 10,000 tons	From 10,000 to 50,000 tons	From 50,000 to 100,000 tons	From 100,000 to 150,000 tons	From 150,000 to 200,000 tons	From 200,000 to 300,000 tons	Over 300,000 tons	Total
Fatal	.....	.....	.....	1	2	1	2	4	4	15
Serious	.....	.....	.....	1	3	8	23	50	22	121
Slight	.....	.....	.....	3	26	16	10	41	19	117
Total	1	1	3	7	40	26	35	95	45	253

Tons of coal produced per accident:										
Fatal	.....	.....	52,283	711,509	457,585	407,116	526,786	544,327	538,917	538,306
Serious	25,903	.....	237,169	237,169	76,264	101,779	45,807	43,546	97,985	66,732
Slight	.....	104,668	116,567	237,169	35,199	50,889	105,357	53,105	113,456	69,014
Total	25,903	104,668	38,856	101,644	22,879	31,317	30,102	22,919	47,904	31,915

FATAL ACCIDENTS

Alexander Pysar, miner, age 46, on January 28th, in the mine operated by the Hillcrest-Mohawk Collieries Ltd., Bellevue. He was cleaning manway, and fell into chute, resulting in death.

R. G. Mather, overman, age 32, on March 26th, in the mine operated by the Riverdale Coal Co. Ltd., Edmonton. He was attempting to lower a 20 foot length of pipe down the air shaft, when it came in contact with the high tension wires, causing fatal injuries.

Joe Klus, miner, age 47, on April 30th, in the mine operated by the Rosedale Collieries Ltd., Rosedale. Rock fell from roof of 22 Room, 16 East, causing fractured neck and skull, resulting in death.

Austin L. Brown, fireboss, age 56, on May 19th, in the mine operated by the Regal Coal Co. Ltd., Drumheller. He was operating a battery locomotive in 14 West Entry, 3 Butt, when he was crushed between locomotive and the roof or side of entry, causing fatal injuries.

Sydney Lain, driver, age 22, on May 27th, in the mine operated by the Foothills Collieries Ltd., Foothills. He fell in front of trip at Landing parting, No. 6 North Entry, and was jammed under the bumper of the first car, causing fatal injuries.

Frank Blasetti, miner, age 24, on June 3rd, in the mine operated by the Brazeau Collieries Ltd., Nordegg. He was putting up legs for a set of timber in No. 8 Room, 5 Level, 1 Slope, No. 3 Seam, when a large slab of rock fell on his face and chest, causing fatal injuries.

Hector McQuarrie, miner, age 41, on June 23rd, in the mine operated by the Brazeau Collieries, Ltd., Nordegg. He was mining coal on bench of No. 22 Room, 3 L. Level, when coal broke away from face, knocking him off bench, causing injuries to chest, resulting in death.

William McDonald, overman, age 36, on June 28th, in the mine operated by the Western Monarch Coal Mining Co. Ltd., Drumheller. He was pulling loaded trip to outside in 2 West Entry, between 5 and 6 Slant, and fell under locomotive, causing fatal injuries.

George L. Paul, shovel operator, age 53, on July 21st, in the mine operated by the Cadomin Coal Co. Ltd., Cadomin. He was loading coal from working face and a quantity of coal slid down, pinning him against cab, resulting in suffocation.

Joe Turner, hoistman, age 44, on July 28th, in the mine operated by the Brazeau Collieries Ltd., Nordegg. He was caught between rope and drum, causing injuries which resulted in death.

James A. Irving, machinist, age 23, on July 29th, in the mine operated by the Sterling Collieries Ltd., Sterco. He was buried under bank, while assisting to dam creek water from running into coal pit, which resulted in death.

James Walker, truck driver, 28, on August 27th, at the mine operated by the McGillivray Creek Coal & Coke Co. Ltd., Coleman. He was working in main dump chute at surface, D Level, when he slipped and slid to bulkhead, fracturing his neck, which resulted in death.

James O'Rourke, shovel oiler and truck spotter, age 24, on September 15th, at the mine operated by the Mountain Park Coals Ltd., Mountain Park. He was apparently squeezed between truck and power shovel, resulting in fatal injuries.

Stephen Charchuk, miner, age 39, on September 17th, in the mine operated by the Gregg River Collieries Ltd., Gregg River. He was grading for track at tunnel entrance, when bulldozer knocked out brace which struck workman on head, causing fractured skull, which resulted in death.

Roland Snell, miner, age 35, on October 1st, in the mine operated by the Hillcrest-Mohawk Collieries Ltd., Bellevue. He was timbering in 3 Raise, 6 Back Angle off 12 Raise, when some timbers fell out, knocking him down, causing fatal injuries.

ACCIDENTS AS THEY OCCURRED BY MONTHS DURING THE YEAR 1947:

Months	Above Ground				Under Ground				Total Above and Under Ground
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	
January		5		5	1	11	10	22	27
February			1	1		7	11	18	19
March	1	3	3	7		6	12	18	25
April			2	2	1	6	10	17	19
May			1	1	2	17	6	25	26
June					3	4	8	15	15
July	2	3	3	8	1	6	3	10	18
August	1	1	2	4		9	4	13	17
September	2	4	1	7		8	7	15	22
October		2	1	3	1	12	7	20	23
November		1	1	2		6	6	12	14
December		2	6	8		8	12	19	27
Total	6	21	21	48	9	100	96	205	253

ACCIDENTS OCCURRING IN THE PROVINCE ABOVE AND UNDER GROUND DURING THE YEAR 1947:

Cause of Accident	Above Ground				Under Ground				Total Above and Under Ground
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	
Box-car handling		1	3	4					4
Bucking coal							2	2	2
Chute loading						2	1	3	3
Coal-cutting machinery						2	3	5	5
Coupling cars						4	4	8	8
Explosives		3	1	4		2	1	3	7
Fail of coal					1	34	14	49	49
Fail of rock					2	20	17	39	39
Haulage		1		1	4	23	18	45	46
Loading coal	1		2	3		1	10	11	14
Loading machinery						2	4	6	6
Miscellaneous	2	12	14	28	1	9	19	29	57
Spragging cars							1	1	1
Strip-mining	3	3	1	7					7
Timbering					1	1	2	4	4
Tipple machinery		1		1					1
Total	6	21	21	48	9	100	96	205	253

THE MINES BRANCH

Accidents occurred in the Province above and under ground for the year 1947,
classified according to the areas in which they occurred:

BITUMINOUS

Area	Above Ground				Under Ground				Total Above and Under Ground
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	
Cascade .....	..	1	..	1	..	6	1	7	8
Nordeg .....	..	..	3	3	3	2	3	8	11
Crowsnest	1	11	3	15	2	29	22	53	68
Mountain Park	3	2	5	10	..	7	5	12	22
Coalspur	1	..	1	2	1	2	7	10	12
Lethbridge .....	..	2	..	2	..	7	12	19	21
Morley .....	..	..	1	1	..	..	..	..	1
Saunders .....	..	..	..	..	..	1	..	1	1
Total	5	16	13	34	6	54	50	110	144

SUB-BITUMINOUS

Drumheller .....	..	2	6	8	3	41	34	78	86
Edmonton	1	3	2	6	..	5	12	17	23
Total	1	5	8	14	3	46	46	95	109

BITUMINOUS—Continued

Cause	Above Ground				Under Ground				Total Above and Under Ground
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	
Timbering, squeezed finger between two planks								1	1
Timbering, struck hand with timber hook								1	1
Coal-cutting Machinery, foot caught in loop of trailing cable									1
Bucking Coal, piece rolled on his hand						1			2
Loading Machinery, caught arm between loader and car						1			1
Loading Machinery, squeezed finger between conveyor pans						1			1
Loading Machinery, handle of duckbill hit his hand						3			3
Coupling Cars, squeezed between cars									
Coupling Cars, foot caught between bumpers of cars							1		1
Explosives, hit by flying coal from shot									3
Explosives, powder exploded prematurely at strip-mine		3		3				1	2
Explosives, struck shot with pick									
Chute Loading, steel checkboard fell on hand									1
Chute Loading, fell on sheet iron									1
Chute Loading, piece of coal fell on his foot									1
Miscellaneous, squeezed between wagon and timber pile									1
Miscellaneous, finger caught while loading timbers									1
Miscellaneous, hit his finger with hammer									1
Miscellaneous, opening electric switch, flash affected eyes									1
Miscellaneous, plank fell on his foot									1
Miscellaneous, slipped and fell									1
Miscellaneous, squeezed thumb between timbers									1
Miscellaneous, burned hand when electric plug arced									8
Miscellaneous, steel from hammer hit his eye									3
Miscellaneous, slipped and fell into chute									1
Miscellaneous, squeezed arm between prop and buggy									1
Miscellaneous, squeezed finger between belt and pulley									1
Miscellaneous, dropped rail on finger									1
Miscellaneous, truck wheel ran over him									1
Miscellaneous, steel bar slipped and caught finger									1
Miscellaneous, caught between cars and rotary dump									1
Miscellaneous, repairing dam, hit in face with cement									1
Miscellaneous, fell over timbers									1
Miscellaneous, bulldozer knocked out brace, which fell on him									1
Miscellaneous, wind blew grit in his eyes	1			1					1
Miscellaneous, repairing tire, rim flew out and hit him				1					1
Miscellaneous, pipe fell on him									1
Miscellaneous, fractured hand while unloading machinery									1
Total	5	16	13	34	6	54	50	110	144

SUB-BITUMINOUS

Cause	Above Ground				Under Ground				Total Above and Under Ground
	Fatal	Serious	Slight	Total	Fatal	Serious	Slight	Total	
Miscellaneous, loading portable welder on car, same fell on foot	.....	1	.....	1	.....	.....	.....	.....	1
Miscellaneous, filling cardox shell, hit hand	.....	.....	1	1	.....	.....	.....	.....	1
Miscellaneous, caught finger between prop and car	.....	.....	1	1	.....	.....	.....	.....	1
Total	1	5	8	14	3	46	46	95	109

SUMMARY

Bituminous	5	16	13	34	6	54	50	110	144
Sub-Bituminous	1	5	8	14	3	46	46	95	109
Total	6	21	21	48	9	100	96	205	253

Accidents during 1947, classified according to the Mine in which they occurred:

BITUMINOUS COAL FIELD

Name of Operator	Area	Above Ground			Under Ground			Total Above and Under Ground		
		Fatal	Serious	Slight	Total	Fatal	Serious		Slight	Total
B. Ainsley & Sons	Morley			1	1					1
Bighorn & Saunders Creek Collieries, Ltd.	Saunders						1			1
Brazeau Collieries, Ltd.	Nordegg			3	3	3	2	3		8
Cadomin Coal Co., Ltd.	Mountain Park	1	1	1	3		1	1		5
Canmore Mines, Ltd.	Cascade		1		1		6	1		8
Foothills Collieries, Ltd.	Coalspur					1	1	2		4
Hillcrest Mohawk Collieries, Ltd.	Crowsnest		1		1		3	3		7
Gregg River Collieries Ltd.	Mountain Park	1		1	2	1	2			5
International Coal & Coke Co., Ltd.	Crowsnest		1	1	2		4	7		11
Lethbridge Collieries, Ltd. (1263)	Lethbridge					2	3	5		10
Lethbridge Collieries, Ltd. (1464)	Lethbridge		2		2		3	1		6
Luscar Coals, Ltd.	Mountain Park		1	1	2		3	3		9
Mountain Park Coals, Ltd.	Mountain Park	1			1		8	6		15
McGillivray Creek Coal & Coke Co., Ltd.	Crowsnest	1			1		1	7		9
McLeod River Hard Coal Co. (1941), Ltd.	Coalspur			1	1					1
Sterling Collieries Ltd.	Coalspur					1				1
West Canadian Collieries, Ltd. (87)	Crowsnest						12	5		17
West Canadian Collieries, Ltd. (396)	Crowsnest		8	1	9		3	4		16
West Canadian Collieries, Ltd. (1584)	Crowsnest		1	1	2			2		4
Total		5	16	13	34	6	54	50	110	144

THE MINES BRANCH

SUB-BITUMINOUS COAL FIELD

Name of Operator	Area	Above Ground			Under Ground			Total Above and Under Ground
		Fatal	Serious	Slight	Fatal	Serious	Slight	
Banner Coals, Ltd.	Edmonton			2		1	9	10
Blue Point Coal Mine	Edmonton					1		1
Brilliant Coal Co.	Drumheller			2		1	4	5
Commander Coal Co.	Drumheller			1		10	8	18
Great West Coal Co., Ltd.	Edmonton		1				1	2
Hy-Grade Coal Mining Co., Ltd.	Drumheller					3	7	10
Midland Coal Mining Co., Ltd.	Drumheller					5	2	7
Minute Coal Co., Ltd.	Drumheller						3	3
Morinville Collieries Ltd.	Edmonton		1				1	1
Monarch Coal Mining Co. Ltd.	Drumheller			3		1		3
Munson Hill Coal Mine	Drumheller					1		1
Murray Collieries, Ltd.	Drumheller		1			1		1
Newcastle Collieries, Ltd.	Drumheller					1	2	3
Red Deer Valley Coal Co., Ltd.	Drumheller					5	5	5
Red Hot Coal Co., Ltd.	Edmonton					1		1
Regal Coal Co., Ltd.	Drumheller					6		6
Riverdale Coal Co. Ltd.	Edmonton	1				2		2
Rosedale Collieries, Ltd. (346)	Drumheller		1			2		2
Saskatchewan Federated Co-Operatives, Ltd.	Drumheller		1			4		4
J. B. Starky Co., Ltd.	Edmonton					1	1	2
Western Gem & Jewel Collieries Ltd.	Drumheller					1	4	5
Total		1	5	8	14	3	46	95
								109

SUMMARY

Bituminous	5	16	13	34	6	54	50	110	144
Sub-Bituminous	1	5	8	14	3	46	46	95	109
Total	6	21	21	48	9	100	96	205	253

LIST OF PROSECUTIONS INSTITUTED UNDER THE COAL MINES REGULATION ACT, FOR THE YEAR ENDING DECEMBER 31, 1947

Mine in which Contravention was Committed	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
Regal Coal Co. Ltd.	Mine Electrician	Did fail to make dead, without delay, a faulty electrical circuit	Convicted	Fined \$5.00	\$6.25
McGillivray Creek Coal & Coke Co. Ltd.	Tippie Labourer	Smoking in confines of tippie	Convicted	Fined \$5.00	3.00
West Canadian Collieries, Ltd.	Timber Packer	Possession of cigarette	Convicted	Fined \$5.00	3.00
Luscar Coals Ltd.	Overman	Failing to make an inspection for a place that was intended to be worked. Failing to initial books under his charge, daily	Convicted	Fined \$5.00	3.00
Luscar Coals Ltd.	Manager	Failing to provide adequate ventilation	Not Convicted	None	.....
Red Glow Coal Co. Ltd.	Miner	Unlawfully work as a miner without having the necessary paper	Convicted	Fined \$200.00	.....
Red Glow Coal Co. Ltd.	Overman	Acting as Overman without having first obtained the necessary permit	Convicted	Fined \$5.00	3.25
Prairie Pride Mine	Owner	Did recommence mining operations at a mine at which mining operations have been discontinued for a period of more than twelve months, without a permit having been issued by the Chief Inspector of Mines	Convicted	Fined \$10.00	3.25
Hillcrest Mohawk Collieries Ltd.	Fireboss	Did have tamped more than one dependent shot	Convicted	Fined \$20.00	7.60
McGillivray Creek Coal & Coke Co. Ltd.	Timber Packer	Did have in his possession tobacco and papers	Convicted	Fined \$10.00	3.00
Brilliant Coal Co. Ltd.	Miner	Being a person in or about a mine did commit an act likely to cause danger to the mine or to himself by fighting	Convicted	Fined \$5.00	4.00
Brilliant Coal Co. Ltd.	Manager	Being a person in or about a mine did commit an act likely to cause danger to the mine or to himself by fighting	Convicted	Fined \$5.00 or 15 days	3.70
McGillivray Creek Coal & Coke Co. Ltd.	Miner	Did have in his possession three lucifer matches	Convicted	Fined \$5.00 or 15 days	3.25
Gregg River Collieries, Ltd.	Rock driller and Powder Man	Did commit an act likely to cause danger to himself or to some other person, by using an excessive amount of powder	Convicted	Fined \$1.00	.....
Sterling Collieries Ltd.	Manager	Did fail to notify the Mines Branch of his absence, and did further fail to appoint a competent person in charge of said mine while being absent	Convicted	Fined \$30.00 or 30 days	11.05
			Convicted	Fined \$20.00 or 30 days	6.40

THE MINES BRANCH

BOARD OF EXAMINERS

The Provincial Board of Examiners during the year 1947 consisted of the following:
As representing:

- (a) The Mine Inspectorate: John Crawford, Chief Inspector of Mines.
 - (b) Managers: A. C. Dunn and William Wilson.
 - (c) Working Miners: Andrew Campbell and H. J. Holly.
- Secretary: Muriel Roberts.

Examinations during the year were held as follows:

For Third Class at the following centres: Blairmore, Canmore, Lethbridge, Edmonton, Cadomin and Drumheller, on May 27th.

For First and Second Class at the following centres: Calgary and Edmonton, on June 3rd, 4th and 5th.

For Mine Surveyor at the following centres: Edmonton and Calgary, on June 5th.

For Mine Electrician at the following centres: Blairmore, Lethbridge, Edmonton, Cadomin, Drumheller, and Canmore, on May 27th. This examination is divided into First and Second Class Mine Electrician.

Nine candidates presented themselves for examination for First Class Certificates, of whom one was successful. Three First Class Interchange were also granted during the year.

Twenty-nine candidates presented themselves for examination for Second Class Certificates, of whom fifteen were successful.

Forty-six candidates presented themselves for examination for Third Class Certificates, of whom thirty were successful.

Eight candidates presented themselves for examination for Mine Surveyors' Certificates, of whom four were successful.

Twenty-one candidates presented themselves for examination for Mine Electricians' Certificates; ten for First class, of whom three were successful, and eleven for Second class, of whom four were successful.

The list following herewith gives the names of successful candidates for all classes of certificates during 1947.

LIST OF NAMES OF HOLDERS OF FIRST, SECOND AND THIRD CLASS, MINE
SURVEYORS' AND MINE ELECTRICIANS' CERTIFICATES

Issued by the Government of the Province of Alberta during the year 1947.

FIRST CLASS

Name	Address	Cert. No.	Date of Issue
Hooks, Albert	Calgary	11	18- 7-47

FIRST CLASS INTERCHANGE

Cochrane, James	Cumberland, B.C.	12	31- 7-47
Dickson, James	Victoria, B.C.	9	3- 3-47
McKay, Walter	Michel, B.C.	10	28- 5-47

SECOND CLASS

Bianchini, Meno J.	Hillcrest	29	18- 7-47
Donaldson, Mathew W.	Shaughnessy	33	18- 7-47
Emmerson, Charles A.	Bellevue	35	18- 7-47
Ellison, Frederick	Drumheller	36	18- 7-47
Fisher, John M.	Shaughnessy	30	18- 7-47
Farmer, James	Drumheller	31	17- 7-47
Marconi, Gordon V.	Coleman	27	18- 7-47
Mitchell, Robert A.	Luscar	28	18- 7-47
Stocco, Reno	Drumheller	25	18- 7-47
Streckler, John	Rosedale	32	18- 7-47
Shephard, William L.	East Coulee	34	18- 7-47
Senycz, John J.	Bellevue	37	18- 7-47
Schymizek, John	Wabamun	38	18- 7-47
Stratton, Robert	Wabamun	39	18- 7-47
Wakaruk, George	Newcastle	26	18- 7-47

THIRD CLASS

Allman, William	Coleman	79	30- 1-47
Brown, Richard G. F.	Cadomin	87	18- 7-47
Brown, John R. N.	Cadomin	105	18- 7-47
Currie, Campbell	East Coulee	81	18- 7-47
Crawford, Andrew B.	Mountain Park	95	18- 7-47
Douglas, Horace L.	Cadomin	83	18- 7-47

List of Names of Holders of Third Class Certificates—Continued

Name	Address	Cert. No.	Date of Issue
Dombroski, Theodore S.	Mercoal	85	18- 7-47
Dziedzic, Joseph C.	Blairmore	94	18- 7-47
Deugan, Frederick H.	Coleman	97	18- 7-47
Diamond, Omer	Blairmore	106	18- 7-47
Ewing, John J.	Rosedale	93	18- 7-47
Fry, George H.	Hillcrest	86	18- 7-47
Kerr, Fraser	Langford Park	96	18- 7-47
Koehler, William A.	Wabamun	98	18- 7-47
Lyons, Frank Q.	Blairmore	103	18- 4-47
McIntyre, Joseph P.	Coleman	92	18- 7-47
McLaren, Ian	Cadomin	99	18- 7-47
McIntyre, John R.	Mercoal	107	18- 7-47
Nedimovich, Stanley	Mercoal	110	18- 7-47
Potter, Albert T.	Drumheller	88	18- 7-47
Ramsay, Hector M.	East Coulee	102	18- 7-47
Senycz, John J.	Bellevue	84	18- 7-47
Sartore, Lucien	Mercoal	101	18- 7-47
Strader, Donald M.	Gadsby	108	18- 7-47
Voynovich, Rade	Robb	104	18- 7-47
Walker, Ian M.	Blairmore	89	18- 7-47
Wisla, Michael	Hillcrest	90	18- 7-47
Woods, Robert W.	Wabamun	91	18- 7-47
Wisla, Martin	Hillcrest	100	18- 7-47
Wright, Albert	Mountain Park	109	18- 7-47
Zemek, Joseph	Frank	82	18- 7-47

MINE SURVEYOR

Brown, David T.	Blairmore	6	18- 7-47
Brown, John D. B.	Blairmore	8	18- 7-47
McKinnon, Donald F.	Cadomin	7	18- 7-47
Worthington, Willard T.	Edmonton	9	18- 7-47

MINE ELECTRICIAN—FIRST CLASS

Gitzel, Edward S.	Luscar	7	18- 7-47
Johnson, A. E.	Edmonton (duplicate)	126	3- 3-47
Quintilio, Daniel	Bellevue	5	18- 7-47
Rice, Robert G.	Cadomin	6	18- 7-47

SECOND CLASS

Conlin, Lloyd R.	Drumheller	6	18- 7-47
Johnson, John C.	Lethbridge	7	18- 7-47
Kosinsky, Victor	Nordegg	5	18- 7-47
Wyrostok, Emil	Shaughnessy	8	18- 7-47

**NUMBER OF MINES OPENED, RE-OPENED, CLOSED AND ABANDONED ACCORDING
TO AREAS AND KIND OF COAL, DURING THE YEAR**

INFORMATION REGARDING INSPECTION DISTRICTS

Chief Inspector of Mines—John Crawford, Provincial Building, Edmonton, Alberta.
Telephone 22698.

Assistant Chief Inspector of Mines—J. A. Dutton, Provincial Building, Edmonton, Alberta.
Telephone 22889.

Electrical Inspector of Mines—Burton Tait, Provincial Building, Edmonton, Alberta.
Telephone 28614.

Inspection District	Area	Area Number	Character of Coal	No. of mines in operation, Dec. 31, 47.	Mines opened during the year	Mines re-opened during the year	Mines closed during the year	Mines abandoned during the year	Name and Address of District Inspector of Mines
Edmonton-Camrose	Camrose	5	Sub-bituminous	5				1	J. Thomson, Provincial Bldg., Edmonton, Alta., Tel. No. 28612.
	Castor	8	Sub-bituminous	13	1	3		4	
	Edmonton	15	Sub-bituminous	27	2	4		3	
	Halcourt	18	Bituminous	3		1		2	
	High Prairie	48	Sub-bituminous						
	Pembina	31	Sub-bituminous	5	1	1		2	
	Prairie Creek	33	Bituminous	1					
	Rochester	35	Sub-bituminous	2					
	Tofield	42	Sub-bituminous	5		3		2	
	Westlock	45	Sub-bituminous	1	1	1		1	
	Wetaskiwin	46	Sub-bituminous	1					
	Whitecourt	47	Sub-bituminous	1		1		1	
	No Area		Bituminous					1	
Calgary	Carbon	6	Sub-bituminous	2					W. E. G. Hall, New Court House Building, Alta., Calgary, Alta., Tel. No. M842-84.
	Cascade	7	Bituminous	2	1				
	Highwood	19	Bituminous						
	Morley	23	Bituminous	1					
	Nordeggy	25	Bituminous	1					
	Pekisko	30	Bituminous	1					
Edson	Saunders	36	Bituminous	2					A. Muir, Edson, Alta., Tel. No. 35.
	Coalspur	11	Bituminous	5				1	
Blairmore	Mountain Park	24	Bituminous	4		1			J. D. B. Brown, A. L. Lister, Blairmore, Alta., Tel. No. 70.
	Crowsnest	12	Bituminous	7				1	
Pincher	Pincher	32	Bituminous	1				1	James Horne, Robert Shaw, Drumheller, Alta., Tel. No. 413.
Drumheller	Ardley	1	Sub-bituminous	8	2	2	2		James Horne, Robert Shaw, Drumheller, Alta., Tel. No. 413.
	Big Valley	2	Sub-bituminous	2	1			1	
	Carbon	6	Sub-bituminous	9		2	2		
	Castor	8	Sub-bituminous	8		3	3		
	Drumheller	14	Sub-bituminous	23	2	2	1	1	
	Gleichen	17	Sub-bituminous	4					
Lethbridge	Sheerness	38	Sub-bituminous	7		3	2		E. H. Morgan, Lethbridge, Alta., Tel. No. 3325.
	Brooks	3	Sub-bituminous	1					
	Champion	9	Sub-bituminous	3					
	Lethbridge	20	Bituminous	6		1	1		
	Milk River	22	Sub-bituminous	1	1				
	Pakowki	28	Sub-bituminous						
Redcliff	Redcliff	34	Sub-bituminous	1					
	Taber	41	Sub-bituminous	4		2	1		
Total				167	12	30	30	6	

GOVERNMENT OF THE PROVINCE OF ALBERTA

MINES BRANCH

EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

June 3, 4 and 5, 1947

FIRST CLASS CERTIFICATES

Marks obtainable 200.

Marks required 120.

Paper No. 1.

Time—Three and one-half hours.

THE COAL MINES REGULATION ACT

	Values
1. What are the requirements of Section 8 of The Coal Mines Regulation Act regarding the duty of an Inspector when finding a dangerous condition in a mine, also regarding the objection by owner or agent?	18
2. What are the requirements of Section 11 of the above Act, with regard to employment of males and females, medical certificates of employees, etc?	18
3. What are the requirements of Section 20 of the above Act, with reference to payment of wages?	25
4. What are the provisions of Section 73 of The Coal Mines Regulation Act with reference to prohibition of explosives and machinery of certain types, in or used in a mine, also as to permits for demonstration purposes for explosives and machinery?	22
5. What are the provisions of Section 83 of the above Act with reference to raising and lowering of persons and materials, and regarding safety devices?	35
6. What are the requirements of Section 96 of the above Act which reference to the abandonment of a mine, notices and duties of owner?	25
7. What are the requirements of Section 105 of The Coal Mines Regulation Act as to inquests, duties of coroner, etc., notices?	25
8. What are the powers of the Chief Inspector under Section 112 of the above Act where dangerous conditions as to dust, etc., are found in a mine?	10
9. What are the provisions of Section 132 of the above Act regarding precautions to be taken when approaching dangerous accumulations of gas or water?	12
10. What are the requirements of Electrical Regulation (d), of the above Act, as to notices to be posted?	10

GOVERNMENT OF THE PROVINCE OF ALBERTA

MINES BRANCH

EXAMINATIONS UNDER THE COAL MINES REGULATION ACT

June 3, 4 and 5, 1947

FIRST CLASS CERTIFICATES

Marks obtainable 200.

Marks required 120.

Paper No. 2.

Time—Three and one-half hours.

GASES, SHOT-FIRING AND SAFETY LAMPS

	Values
1. What special periodical investigations are necessary in connection with those districts which have been sealed off in a mine in consequence of spontaneous combustion? State your views with regard to the combustion and position of the stoppings?	18
2. At a certain mine, the temprature of the inlet is 38°F and at the outlet 62°F, the mine resistance is equal to 15 pounds per square foot, and the atmospheric pressure, 14.7 pounds per square inch. The quantity of air entering the mine is 100,000 cubic feet per minute, and the return air current is found to contain 4% of marsh gas. (a) What quantity of marsh gas is given off in the mine? (b) What is the least amount of decrease in the quantity of air that will render the return air explosive? (c) What increase of gas will render the return air explosive?	22
3. Describe the occurrence known as "an outburst of gas"? To what causes may it be due? What phenomena may accompany it and what are its usual results? What means can be taken to avoid it in seams liable to such occurrences?	20
4. What is Flashdamp? How is it formed? Where found, and what action has it on the flame of safety lamps? An area contains 2658 cubic feet of this gas. What volume would there be of the two gases forming this flashdamp? Show how you would find the Specific Gravity of flashdamp from the Specific Gravities of the two gases forming flashdamp	16

5. The dry and wet bulbs of the hygrometer when making tests in the mine are found to be 60°F and 55°F. The barometer reading 28 inches. The pressures of the vapour of saturation for the given temperatures at sea level are Barometer .5183 inch and .4333. What is the degree of saturation of the mine air? Should the degree of saturation be increased, what effect would it have on the weight of air in circulation? 20
6. What is Silicosis? Describe how it may be caused in mines, and the precautions that should be taken to reduce the dangers from this disease to a minimum 20
7. Describe clearly how you would collect a sample of air for analysis: (a) at a coal face; (b) behind a stopping which has been built to seal off spontaneous heating; if the analysis of a sample of air gave the following results what deduction would you make from same? 22

Carbon dioxide	3.50%	Ethane	10.51%
Oxygen	1.02%	Ethylene	4.18%
Methane	80.15%	Carbon monoxide	0.64%
8. Where would you expect to find the most dangerous deposits of coal dust in modern mines? Give your opinion as to "zones" treated with rock-dust and "zones" treated by watering, as a means of limiting the extent of: (a) a fire-damp explosion, (b) an explosion of firedamp and coal dust 20
9. A flat lying seam of coal gives off a small quantity of fire-damp. Overlying the main seam by 8 feet is a small seam of coal 12 inches thick. Where pillars are drawn, caving occurs and firedamp is given off freely. What precautions would you take to safeguard against this condition? 22
10. Describe fully what substitutes or devices can be used in a gaseous, dry and dusty mine, to improve the risk from shot-firing or to eliminate shot-firing altogether 20

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 3, 4 and 5, 1947

FIRST CLASS CERTIFICATES

Marks obtainable 200.

Marks required 120.

Paper No. 3.

Time—Three and one-half hours.

VENTILATION

Values

1. A mine has two main roadways each 600 yards long. One is timbered closely and is 6 feet high, 6 feet wide near the roof, and 9 feet at the floor; the other is lined with standard steel arches, splayed type, 7 feet high, 7 feet wide at springings, 8 feet wide at the floor. All measurements are taken in the clear. Calculate (a) the area of each road, inside the supports; (b) their perimeters; (c) their rubbing surfaces. If the quantity passing is 20,000 cubic feet per minute in each case, what is the air-horsepower, using your own estimate of the coefficient of friction? 22
2. An area in the bituminous field is being developed by rock slopes driven from the surface to intersect the coal seam, which is 16 feet thick and inclined at 10 degrees. The average depth of the seam from the surface is 800 feet and the seam is known to give off large quantities of firedamp. The output is expected to run from 1000 to 1200 tons per day. What capacity fan would you introduce? Give fully your reasons 24
3. Describe the construction of a fan drift connecting the fan to the upcast shaft? The quantity of air passing is 450,000 cubic feet per minute and provision has to be made against damage to the fan in the event of explosions taking place, also for the reversal of the air current. 18
4. Is there any difference between booster fans and auxiliary fans and the purposes they serve? Discuss fully the conditions under which you would install either with advantages and disadvantages 18
5. Two fans of equal capacity and water gauge, and of similar construction, are placed in series in a mine. What would be the increase in quantity of air due to this second fan being placed in the mine? 18
6. (a) What would you consider moderate velocities of air currents in main airways and at working faces; (b) what velocity would make the use of a Wolf flame safety lamp dangerous and what effect would a velocity of 1 foot per second and 5 feet per second have on perspiring men; (c) what would be the pressure of an air current of 1,000 feet per minute velocity, against the rib at a right angle bend in an airway? 20

7. Sketch and describe the construction of an air crossing that will be explosion proof, the crossing has to be constructed and not in the solid. What factors must be considered before deciding on the position of air crossings? 20
8. What is meant by: (a) Motive Column? Calculate the motive column for a shaft 1200 feet deep when the temperature in the downcast shaft is 40 degrees F. and the upcast shaft 62 degree F. Barometer 30 inches; (b) An Avasee chimney in fan construction, why is it necessary; (c) Orifice of passage? 22
9. 100,000 cubic feet of air passes through an airway 6 feet by 5 feet in sectional area, and 10,000 feet long, which is divided into three splits as follows: Split A is 6 feet by 6 feet in section, 2,000 feet long; split B is 6 feet by 5 feet in section, 4,000 feet long; and split C is 6 feet by 4 feet in section, 6,000 feet long. What quantity of air will pass in each split while the pressure remains the same? 20
10. Name and describe the different instruments used to examine the condition of the atmosphere of a mine, showing the principle and application of each 18

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 3, 4 and 5, 1947

FIRST CLASS CERTIFICATES

Marks obtainable 200.

Marks required 120.

Paper No. 4

Time—Three and one-half hours.

PRACTICAL WORK, MINE RESCUE AND FIRST AID

- | | Values |
|--|--------|
| 1. Discuss briefly the considerations which determine the choice of method of working a coal seam. How would seasonal conditions affect the choice? | 18 |
| 2. Electrically driven coal-cutters and conveyors are being used on a coal face. What special precautions should be taken in conjunction with the equipment, and in the working operations, to prevent an ignition of gas or coal dust? | 20 |
| 3. Where bituminous coal is wet-washed in its preparation for market, what methods of drying the coal are available. Deal, also, with the fines known as sludge | 22 |
| 4. Three conveyors, A, B and C, discharge coal to the same loading point. When working to capacity, A and B fill a car in 10 minutes, B and C in 6 minutes and A and C in 7½ minutes. Under these conditions, how long would it take each conveyor to fill a car, when working alone? | 18 |
| 5. In a seam of coal pitching 30° and 10 feet in thickness, a district which was developed many years ago is to be reopened for the purpose of extracting the pillars. The original size of rooms were 10 feet in width and the pillars formed were 6 feet wide and 80 feet long. Overlying the seam is a cap rock varying in thickness of from 6 inches to 2 feet, but the cap rock has caved in mostly all the rooms and crosscuts. State how you would extract the room pillars, which are 600 feet in length | 22 |
| 6. Sketch and describe how you would develop and work a district for duck-bill operations in a seam 5 feet in thickness. Show, also, the systematic method of timbering you would adopt for rooms 26 feet in width where the roof and floor is of a soft nature | 23 |
| 7. In a flat lying seam of coal 6 feet in thickness, with a dry floor and fairly good roof, a squeeze and a creep has occurred on the main haulage road which has been retimbered several times, but does not overcome the trouble. State, in your opinion, the cause or causes of this trouble and the steps you would take to overcome same | 20 |
| 8. If a boom 10 inches in diameter and 6 feet between notches bears a certain load, what should be the diameter of a boom 12 feet between notches to bear the same load? | 15 |
| 9. Your company has decided to appoint a Safety Engineer, to devote his whole time to safety problems. What is your opinion of the usefulness of such appointment? What qualifications should he hold and what should be his status? | 22 |
| 10. Make a diagrammatic sketch of any type of self-contained breathing apparatus with which you are familiar, and describe the same | 20 |

THE MINES BRANCH

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 3, 4 and 5, 1947

FIRST CLASS CERTIFICATES

Marks obtainable 200.
Paper No. 5.

Marks required 120.
Time—Three and one-half hours.

MACHINERY

	Values
1. Electrically driven coal cutters and conveyors are to be used on a longwall face 320 feet in length and dipping 6 degrees. What special precautions should be taken to minimize the risk of an ignition of firedamp? Make a sketch plan showing the position of the switchgear, the conveyor or motor and the course of the ventilation	22
2. Find the cost per ton of coal drawn from an incline rising 1 in 7 and 1500 feet long for an output of 500 tons in 7 hours by means of an endless rope haulage if the cost of the electric power used is 12 cents per k.w. hour. The overall efficiency of the haulage plant is to be taken as 70 per cent., and the rope speed $2\frac{1}{2}$ miles per hour	20
3. A self-acting incline is 1200 feet long, with an average inclination of 4 degrees. The rope is used in $\frac{1}{2}$ inch diameter and four cars are being run in each trip. The total weight of the four empty cars and couplings is 5000 lbs. Find the minimum amount of coal in pounds, that would have to be loaded into each car to bring up the empty trip and to overcome frictional and other resistances. Assume your own factors for same	22
4. Describe the general surface arrangements required at a sinking pit where no particular difficulties are anticipated. What arrangements would you make for the disposal of the debris?	20
5. Describe a pumping plant suitable for placing at the bottom of an incline in a seam that gives off gas, to deal with 55 gallons of water per minute to a total head of 300 feet. Choose any kind of power and assume it is available at the pump house. Calculate the horse-power required in raising the water, neglecting friction	18
6. You are proposing to install a battery locomotive in your mine for haulage purposes. Make a plan of the charging station you would build and state the material you would use in its construction. Show by arrows the direction of the ventilation and explain your reasons for choosing this direction	18
7. What size of steel-wire rope will be required to hoist a load of 3 tons from a shaft 200 feet deep, making due allowance for the weight of the rope? ..	15
8. What will be the size of the cylinder of a single engine, with gear-wheels in the ratio of 1 to 6, connected to a drum 5 feet in diameter, to hoist a weight of 4,000 pounds from a shaft 180 feet deep in 15 seconds? What will be the speed of the engine or the number of strokes per minute? What will be the piston speed?	22
9. Give the various methods of mine drainage, and state under what conditions each is most advantageous	21
10. Describe briefly, and in a general way, the several types of air compressors	22

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 3, 4 and 5, 1947

FIRST CLASS CERTIFICATES

Marks obtainable 200.
Paper No. 6.

Marks required 120.
Time—Three and one-half hours.

SURVEYING, LEVELLING AND GEOLOGY

1. The following are the notes of an underground survey:			Values
Station	Bearing	Horizontal distance in feet	
1-2	N 35° E	270.0	
2-3	N 83° 30' E	129.0	
3-4	S 57° E	222.0	
4-5	S 54° 15' W	355.0	
Plot the survey by latitudes and departures on a scale of 100 feet to 1 inch and calculate the length and azimuth of a straight line from Station 5 to Station 1			35

2. A shaft 1,530 feet in depth has reached a coal seam and a roadway has been driven due west from the shaft bottom, for a distance of 11.0418 feet, the first 198 feet being level and the remainder rising at an inclination of 9 inches per yard. From the western extremity of that roadway a rising cross measure drift is to be driven due East at an inclination of 1 in 80 until it holes through into the shaft. At what depth from the surface will it do so? 28
3. Bore holes are put down to a coal seam at three points, A, B and C. The depth to the coal at A is 250 feet, at B 335 feet, and at C 370 feet. The distance from A to B is 1,200 feet, from B to C 1,550 feet, and from A to C 2,250 feet. The surface being level, at what point will the line of strike through B cross the line from A to C? 30
4. Level figures shown on a mine plan at intervals of 100 feet along a haulage roadway are as follows:

At A	110 feet above datum
At 100' from A	115.5 " " "
At 200' from A	119.0 " " "
At 300' from A	122.5 " " "
At 400' from A	120.5 " " "
At 500' from A	118.0 " " "
At 600' from A	119.0 " " "

Plot a section from A to B on a scale of 1 inch equals 100 feet for horizontals and 1 inch equals 10 feet for verticals. Calculate the quantity of material to be removed in order to give a uniform gradient from A to B by cutting the floor. Assume the width of the road to be 10 feet. The depth of the cutting at each 100 feet interval is to be calculated, not measured from the section 35
5. Two sights were taken on level ground to the top of a chimney. Station A is 40 feet due North and Station B is 22.5 feet due South from its centre line. If the sum of the angles at both Stations is equal to a right angle, calculate the height of the chimney 30
6. Describe briefly and show by suitable sketches what is meant by the terms:
 - (a) Displacement of stratified rocks.
 - (b) (1) Outcrop, (2) Strike, (3) Dip.
 - (c) Folding of strata.
 - (d) Domes and Basins.
 - (e) Unconformity.
 - (f) Normal fault and Reverse fault 32
7. A plan as required by Rule 7 of the Rules Governing Examinations under The Coal Mines Regulation Act, must be handed in to the presiding examiners with the answers to this paper 5
8. A profile of an underground levelling as required by Rule 7 of the Rules Governing Examinations under The Coal Mines Regulation Act must be handed in to the presiding examiners with the answers to this paper 5

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 3, 4 and 5, 1947

SECOND CLASS CERTIFICATES

Marks obtainable 200.

Marks required 100.

Paper No. 1.

Time: Three and one-half hours.

THE COAL MINES REGULATION ACT

	Values
1. What are the provisions of Section 15 of The Coal Mines Regulation Act as to hours of employment?	28
2. What are the provisions of Section 60 of the above Act with reference to the duties of an overman?	35
3. What are the requirements of Section 81 of the above Act with reference to shafts for hoisting?	11
4. What are the provisions of Section 109 of The Coal Mines Regulation Act with regard to ventilation?	32
5. What are the requirements of Sections 113 and 114 of the above Act with regard to doors?	10
6. What are the requirements of Section 129 of the above Act with reference to withdrawal of men from the mine when conditions are found dangerous?.....	13
7. What are the requirements of Section 138 of The Coal Mines Regulation Act with reference to operation of drills by mechanical power?.....	12

- | | |
|---|----|
| 8. What are the provisions of Section 159 of the above Act with regard to hoisting engineer or hoistman? | 20 |
| 9. What are the requirements of Explosive Regulation 20 under the above Act regarding the use of non-permitted explosives and delay action fuses, in the driving of rock tunnels? | 27 |
| 10. What are the requirements of Electrical Regulation (g) under the above Act regarding size of conductors, installation and protection? | 12 |

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 3, 4 and 5, 1947

SECOND CLASS CERTIFICATES

Marks obtainable 200.

Marks required 100.

Paper No. 2.

Time: Three and one-half hours.

VENTILATION, GASES, SHOT-FIRING AND SAFETY LAMPS

- | | |
|--|--------|
| | Values |
| 1. What is meant by "Diffusion of Gases"? Do all gases diffuse at the same rate? Do gases separate after they have once diffused? | 18 |
| 2. The water gauge at a mine is 2 inches, the quantity of air passing into the mine is 99,000 cubic feet per minute, and the combined efficiency of fan and motor is 70 per cent. What is the horse-power applied to the motor? If the quantity is increased to 110,000 cubic feet per minute, what is the new horse-power applied to the motor? | 22 |
| 3. What is "natural ventilation"? Why in your opinion has The Alberta Coal Mines Regulation Act insisted that ALL mines must be ventilated by a fan? | 18 |
| 4. What is the function of a "regulator", and why are they installed in a coal mine? What effect has a regulator on the amount of air passing in each ventilation district, and on the total quantity of air passing through the mine? | 20 |
| 5. Being an overman in a bituminous mine in which most of the coal is mined by blasting, it has become necessary for you to employ a new examiner, and he will be required in the course of his duties to fire the shots in his district, and as he has had little or no previous experience in shot-firing, what instructions and advice would you give him so that he may properly carry out his duties in an efficient and safe manner? | 21 |
| 6. A roadway is 5 ft. by 6 ft. and 800 ft. long and 50,000 cubic feet of air passes through it due to 1 inch of water gauge. If the water gauge remains constant, what quantity would pass if the whole roadway is brushed to a height of 8 feet? | 18 |
| 7. What is a "hygrometer"? Explain its principle. What are its uses in a coal mine? | 18 |
| 8. Where would you look for the mine water gauge? What is its purpose in mine ventilation? If on a certain day you observe an unusually low reading on the water gauge, what would you think had happened? | 20 |
| 9. Which is the heavier, pure air or air that is found to contain 2 per cent of CH_4 and 2 per cent of CO_2 ? | 21 |
| 10. In what way is dry coal-dust a source of danger in mines? What means are now in use for counteracting the danger from coal-dust? Are such means sufficient? Discuss the question | 24 |

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 3, 4 and 5, 1947

SECOND CLASS CERTIFICATES

Marks obtainable 200.

Marks required 100.

Paper No. 3.

Time: Three and one-half hours.

PRACTICAL WORK AND FIRST AID

- | | |
|--|--------|
| | Values |
| 1. What are the advantages of using air picks in the bituminous mines in this Province? | 19 |
| 2. What is meant by the term "water blast"? Describe a set of conditions in a coal mine that may later result in a water blast | 18 |

3. What is the purpose of withdrawing timber from the gob? What are the dangers? As overman, give the precautionary measures you would adopt so as to reduce accidents 17
4. Used as a boom, which is the stronger, an 8" x 8" square timber, or a 9" x 7" rectangular timber, the length and quality of the timber being the same in both cases? By calculation give proof of your answer 23
5. A squeeze has occurred which is threatening to cut off the inbye workings of a large area of the mine. State fully what would be the probable cause of the squeeze and how you would overcome the effects of the squeeze so as to extract the coal from the inbye workings 24
6. In an 8 hour shift, 12 men clean up a machine cut conveyor face 300 feet in length, in a seam 4 feet thick with a five foot undercut. What is the daily output in tons off this face? What is the average daily output for each loader in tons? What is the average daily earnings of each loader, if the loading price is 50 cents per ton minus 6% for explosives? The coal has a specific gravity of 1.28 and all calculations to be on a long ton basis. 20
7. Make two sketches of a three-piece set (not necessarily to scale) for an entry 8 feet wide and 6 feet high. First where the roof is friable and heavy, and there is no side pressure. Second, where there is both roof and side pressure and the roof and sides are friable in nature 18
8. How many cubic yards of concrete are used in each yard of roadway if the roadway is 8 feet high and 8 feet wide, the thickness of side walls and the semi-circular position is 15 inches 20
9. Give a general description accompanied by a sketch, of any coal cutting or coal shearing machine you are acquainted with 21
10. Describe clearly what you consider the best arrangement for dealing with haulage of coal from and supplying empty cars to a gate-end conveyor dealing with approximately 250 tons per shift. Set out the rules for your officials in charge to observe to obtain a high efficiency 20

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 3, 4 and 5, 1947

SECOND CLASS CERTIFICATES

Marks obtainable 200.
Paper No. 4.

Marks required 100.
Time: Three and one-half hours.

MACHINERY

- | | Values |
|--|--------|
| 1. Compressed air is used for haulage at a mine. The compressed air pipes have a 6-inch bore and an outer diameter of 6½ inches. The ultimate strength of the steel is 50,000 lbs. per square inch. What is the highest permissible pressure in lbs. per square inch allowing a factor of safety of 5? | 25 |
| 2. In a shaft 800 feet deep, a car of coal is hoisted in half a minute. The weight of the coal is 3000 lbs., weight of rope is 1200 lbs., weight of car is 2000 lbs., and weight of cage is 4000 lbs. What is the effective horse-power of the hoisting engine? Ignore friction | 22 |
| 3. What is meant by the following terms:
(a) Unit of heat?
(b) Unit of work?
(c) Unit of power? | 15 |
| 4. A shaft 900 feet deep and 15 feet in diameter is full of water.
(a) What is the pressure measured in lbs. per square inch, exerted by the water at the bottom of the shaft?
(b) If the water is pumped through a 4-inch pipe at a velocity of 300 feet per minute, how long will it take the pump to empty the shaft? | 24 |
| 5. Show by means of sketches (plan and elevation) a method of supplying the right amount of tension to the rope of an endless rope haulage system | 24 |
| 6. A direct current generator is developing 50 horse-power with an electrical pressure of 500 volts. What is the current flow in amperes? | 21 |
| 7. Calculate the size of the hauling rope required to pull a trip of 10 full cars up an incline 1 in 8. The total weight of each car is one ton, the co-efficient of friction 1/50? | 25 |
| 8. (a) Describe and show by rough sketches, the safest way of fastening a hoisting rope to a drum?
(b) How would you fasten the hoisting cable to the cage? | 24 |
| 9. Name the conditions under which a rope is most likely to break in a slope, and what would you recommend to guard against such contingencies? | 20 |

THE MINES BRANCH

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 3, 4 and 5, 1947

SECOND CLASS CERTIFICATES

Marks obtainable 200.
Paper No. 5.

Marks required 100.
Time: Three and one-half hours.

SURVEYING

Values

1. On a scale of 1 inch equals 100 feet, plot the following survey with scale and protractor:

Station	Horizontal Distance	Bearing
1-2	258 feet	N. 48° 00' E.
2-3	321 "	N. 16° 30' E.
3-4	397 "	N. 65° 15' W.
4-5	412 "	S. 22° 15' W.
5-6	253 "	S. 10° 30' E.

- Give by measurements the length and bearing of the closing line 6-1 35
2. A certain seam cuts a vertical fault, and the upthrow is found to be 60 feet. The seam beyond the fault dips at the rate of 4 inches per yard. What is the length of a drift rising 1½ inches per yard, that would cut the seam beyond the fault? 30
3. In going from Alberta's Eastern boundary to the Rocky Mountains, what outstanding variations in analysis occur in the coal seams, as to moisture, ash, volatile matter and fixed carbon? 25
4. Work out the following level notes, filling in the elevation of each station and check the difference of elevation of Station 1 and Station 6 with back sights and fore sights.

Station	Back Sight	Int. Sight	Fore Sight	Elevation
1				100.00
	5.84			
2		3.08		
	7.87		1.84	
3		1.84		
	4.69		5.04	
4		2.70		
5		3.16		
6			4.23	

5. If on a pitch of 25° there is a pitch distance of 100 yards between two lifts, what would be the pitch distance if the pitch increased to 55°? 35
6. The bearing of an entry taken from the map is S 80° E and the declination of the needle is 7° 30' W. To give correct sights on this entry with a compass, what magnetic bearing would you use? 30
7. How would you proceed to lay off a room at right angles to an entry using only a tape-line? Describe fully 15
8. What is meant in geology by the terms "bed, seam, vein and dike"? 12

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
May 27, 1947

THIRD CLASS CERTIFICATES

Marks obtainable 200.
Paper No. 1.

Marks required 100.
Time: One and one-half hours.

THE COAL MINES REGULATION ACT

Values

1. What are the requirements of Section 62 of The Coal Mines Regulation Act with reference to size of district assigned to an examiner, and his duties in such district? 26
2. What are the interpretations of Section 3 regarding: :
- (a) Miner;
- (b) Timberman;
- (c) Safety lamp;
- (d) Working face? 24
3. What are the duties of persons in charge of a working face as given in Section 149, Rule 20(d) of the above Act? 15

4. What are the duties of a person in charge of a haulage road, plane or incline as given in Section 149, Rule 21, of the above Act? 23
5. What are the requirements of Section 149, Rule 27, of the above Act regarding the maintenance of haulage roads? 20
6. What are the duties of an examiner as set out under Section 152 of The Coal Mines Regulation Act? 32
7. When is a coal face considered prepared for shot-firing as required under No. 10 of Regulations covering care and use of Explosives, under the above Act? 25
8. State the requirements of Section 149, regarding:
 - (a) duties of a trapper in charge of a door;
 - (b) report of accidents by examiners 15
9. What do the Regulations say regarding the storage and opening of carbide drums? 20

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
May 27, 1947

THIRD CLASS CERTIFICATES

Marks obtainable 200.
Paper No. 1.

Marks required 100.
Time: Two hours.

MINE GASES, SHOT-FIRING, EXPLOSIVES AND SAFETY LAMPS

- | | Values |
|--|--------|
| 1. Assuming that a flame type safety lamp has been properly assembled, give six reasons for its failure in a mine | 20 |
| 2. A seam of coal 10 feet thick is undercut to a depth of 5 feet. Three feet from the bottom of the seam is a 2 inch band of hard rock. Explain or show by sketches how you would place your shot holes in a 30' room. Give the number of shots you would use | 24 |
| 3. When testing for gas in a place 7½ feet high and 9¾ feet wide you discover a ½ inch gas cap on your safety lamp 73 feet from the face. Assuming that the gas mixture occupies all the space from its discovery point to the face, calculate the volume of the mixture | 22 |
| 4. Name two of the principal mine gases which are heavier than air, and also two which are lighter than air | 22 |
| 5. Under what condition would you fire more than one shot at any one time in coal, and how many shots at one time is permissible under these conditions? | 22 |
| 6. If when making an examination of a mine you found a large body of explosive gas, state what precautions you would take to prevent an accident from same | 24 |
| 7. What is meant by the Specific Gravity of a gas? Give the Specific Gravity of fire-damp, white damp and black damp | 22 |
| 8. Describe the precautions necessary in general shot-firing and name the conditions under which you would refuse to fire a shot | 24 |
| 9. What is the principle of a flame type safety lamp? | 20 |

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
May 27, 1947

THIRD CLASS CERTIFICATES

Marks obtainable 200.
Paper No. 1.

Marks required 100.
Time: One and one-half hours.

VENTILATION

- | | Values |
|--|--------|
| 1. What effect does a change in atmospheric conditions at the surface have upon a mine generating explosive gases? | 22 |
| 2. Describe the various means, appliances and fixtures necessary to properly conduct the air current to the various parts of a mine | 24 |
| 3. An airway is 8' x 7½' in dimension and there is 9,600 cubic feet of air passing per minute. Find the velocity of the air and state the maximum number of persons which may be employed under these conditions | 20 |
| 4. What indications of Spontaneous Combustion would you look for when inspecting old workings? | 22 |

- 5. Sketch and describe for what purpose the following are used:
 - (a) an air lock;
 - (b) an explosion door;
 - (c) a rock-dust barrier? 24
- 6. During your shift you observe that there is 2½ per cent. of inflammable gas passing with the ventilating current, where men are at work in your district. State what action you would take to safeguard the men. 20
- 7. What conditions in a mine increase the volume of ventilation in the main return airway? 22
- 8. Describe how you would measure the quantity of air passing in an airway ... 22
- 9. Make a sketch of a door regulator. State for what purpose it is used in the ventilation of mines 24

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
May 27, 1947

THIRD CLASS CERTIFICATES

Marks obtainable 200.
Paper No. 1.

Marks required 100.
Time: Two hours.

PRACTICAL WORK

- | | Values |
|--|--------|
| 1. Make a neat sketch of a 3 piece set of timbers for use in an entry where there is liable to be side pressure as the roadway advances, showing how you would wedge it and give reasons for the method you suggest 20 | 20 |
| 2. Explain the theory of a mine pump, and state the parts which require frequent attention in order to keep it functioning properly 22 | 22 |
| 3. A cave 25 feet long, 8 feet wide and an average height of 2½ feet has occurred on the main haulage road. How many mine cars, each holding 27 cubic feet of material, would be required to clear the fall debris? 24 | 24 |
| 4. What is the difference between a "squeeze" and a "cave"? To what cause or causes can squeezes be traced? 22 | 22 |
| 5. What First Aid equipment is required to be kept at a mine for the care of the injured? 18 | 18 |
| 6. What are the dangers incidental to the operation of haulage on a steep slope and how would you guard against them? 24 | 24 |
| 7. What is meant by a fault? Make a neat sketch of the following faults: <ul style="list-style-type: none">(a) Reverse fault;(b) Normal fault;(c) Upthrow fault. 24 | 24 |
| 8. Sketch two different ways of supporting with booms, the roof of an entry at the junction of a room. State which method of timbering you prefer and give reasons for your choice 22 | 22 |
| 9. Describe how you would withdraw props and cogs on a longwall face. State the precautions you would take while doing this work 24 | 24 |

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 5, 1947

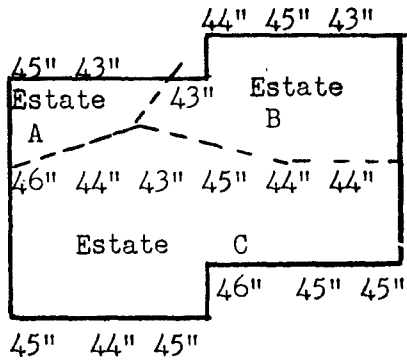
MINE SURVEYORS' CERTIFICATES

Marks obtainable 200.
Paper No. 1.

Marks required 120.
Time: Three and one-half hours.

SURVEYING

- | | Values |
|--|--------|
| 1. The plan of part of a mine worked on the longwall system is shown below, drawn to a scale of 1"=300'. The thickness of the seam at various points in three separate estates, A, B, and C, is marked on the plan. Royalty on estate A is 12 cents per ton, on estate B 10 cents per ton, and on estate C 11 cents per ton. The total tonnage from the area shown is 25,910 tons. Reproduce the plan on your answer sheet on a scale of 1"=100' and calculate from the data given the amount of royalty due to each estate. Assume the weight of the coal at 126 ton per inch-acre. 40 | 40 |



2. A and B are two survey stations on the center line of a steep slope, C and D are traverse stations at the mouth of two levels which have been set off between stations A and B. The co-ordinates of A, B, C and D are as follows:

Station	Latitude	Departure
A	+1954.1'	+1059.0'
B	+1745.7'	+1153.1'
C	+1870.8'	+1101.8'
D	+1805.1'	+1124.0'

- (a) Calculate the length and bearing of a line joining C and D, the rate of dip between C and D is 30°.
- (b) Calculate how far Stations C and D are out of alignment with the center line A-B, measured at right angles
3. The following notes were taken on an underground traverse in a coal seam pitching about 30°. Station 6 is on the slope at 3 level and station 7 is at 4 level. The latitude of station 6 is -2072.49' and the departure is 1321.62'. Elevation Stat. 6=3047.18 feet.

Slope		Distance				Height		Height		Elev.
Station		in feet	Hor. Angle	Vert. Angle		of inst.		of sight		
5-6										
6-7	952.8		L 0°18'	-32°14'		-4.23'		-6.17'		
7-401	186.49		L 91°07'	0°00'		-4.89'		-6.22'		
401-402	120.36		L 5°08'	0°00'		-4.52'		-5.70'		
402-403	252.50		R 5°10'	0°00'		-4.10'		-6.63'		
403-403A	30.66		L 88°01'	+40°18'		-5.06'		-2.18'		
403A-403B	449.93		R 1°57'	+31°18'		-4.37'		-4.62'		
403B-302	474.23		L 0°28'	+33°28'		-4.89'		-2.74'		
302-301	265.40		L 94°23'	0°00'		-5.07'		-1.83'		
301-6	329.26		R 0°24'	0°00'		-8.27'		-0.52'		

- Work out the notes and show the latitudes and departures also elevation of each station on a form ready for plotting
4. Draw a pentagon on a scale of 1"=1' and (a) construct upon it a triangle of equal area and (b) a square of equal area. The length of a side of the pentagon being 2 feet. You are required to show clearly how you arrive at the answer and prove by the rules of Euclid that all three areas are equal
5. State what is meant by the term "Zero Circle" which is used in connection with a planimeter. A planimeter reading tens of square inches is handed to you to measure certain areas on plans drawn to scales of $\frac{1}{360}$, $\frac{1}{1584}$, $\frac{1}{2500}$ and $\frac{1}{10560}$. State the multiplier which you would use on each instance to convert the instrumental reading into acres
6. Oral examination
7. A plan as required by Rule 7 of the Rules Governing Examinations under The Coal Mines Regulation Act must be handed in to the presiding examiners with the answers to this paper

THE MINES BRANCH

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
June 5, 1947

MINE SURVEYORS' CERTIFICATES

Marks obtainable 200.
Paper No. 2.

Marks required 120.
Time: Three and one-half hours.

LEVELLING AND GEOLOGY

Values

1. The following are the notes of a traverse made in a roadway of a mine:

Station	Hor. Angle	Azimuth	Distance in feet
1-2	.....	88°28'	440.0
2-3	170°15'	.....	393.6
3-4	205°47'	.....	181.0
4-5	171°34'	.....	232.1

The levels in feet above a certain datum, taken on the floor of the roadway are as follows: Station 1=70.7'; Station 2=73.1'; Station 3=75.0'; Station 4=76.9'; and Station 5=78.2'. Make a profile of this roadway on a scale of 1"=200 feet for horizontals and 1"=5 feet for verticals. A new roadway is to be driven from Station 2 to a point x where the line 1-2 extended intersects the line 4-5 and this roadway is to have a uniform gradient from Station 2 to x. Calculate the distance that the point x will be from Station 4 and the length and gradient of the new roadway Station 2 to x. 50

2. A coal washery sludge or settling tank has the following inside dimensions: Top part of tank is in the form of a cylinder 35'6" in diameter and 10 feet deep. The lower part of the tank is shaped like an inverted cone with a vertical height of 30'9". Calculate the capacity of the tank when full and the weight of its contents, assuming the specific gravity of the coal sludge at 1.04 30
3. Enumerate briefly the steps which you would take in a precise surface levelling to obtain the maximum of accuracy. Suppose a reading of 12.28 feet is taken on a levelling staff 14 feet in length which owing to an obstruction is held with the top of the staff 1.28 feet out of vertical. What will the approximate reading of the staff be when held vertically? 30
4. Three vertical boreholes have been put down to a seam of coal. The depths of the boreholes to the coal are as follows: Borehole A=523'; borehole B=693', and borehole C=621'. The following are the notes of the survey connecting the top of the boreholes:

Station	Hor. distance in feet	Azimuth
A-1	529.2'	223°18'
1-B	492.3'	220°46'
B-2	407.8'	106°52'
2-C	556.2'	109°12'

The surface elevations of the top of the boreholes are as follows: Hole A, 3846.7'; Hole B, 3753.2'; Hole C, 3737.5'. Plot the position of these holes by latitude and departure to a scale of 1"=200' and calculate the angle of dip of the seam and the azimuth of the strike of the seam 40

5. What is meant by:

- (1) ultimate analysis;
(2) proximate analysis?

With reference to analysis of coal? How would you make the test to determine the proximate analysis of coal? 25

6. Oral examination 20

7. A profile of an underground levelling as required by Rule 7 of the Rules Governing Examinations under The Coal Mines Regulation Act, must be handed in to the presiding examiners with the answers to this paper. 5

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
May 27, 1947

MINE ELECTRICIANS' CERTIFICATES—FIRST CLASS

Marks obtainable 200.
Paper No. 1.

Marks required 120.
Time: One and one-half hours.

THE COAL MINES REGULATION ACT

Values

1. What are the requirements of Section 50 of The Coal Mines Regulation Act regarding when a mine electrician must be appointed, exemptions provided for, and what constitutes an offence against the Act? 55

2. What are the requirements of Regulation (d) of the Electrical Regulations regarding Notices to be exhibited? 25
3. State the requirements of Regulation (p) of the Electrical Regulations regarding parts of a mine where gas or coal-dust is likely to occur in quantity 50
4. State the requirements of Regulation (n) of the Electrical Regulations regarding flexible cables for portable apparatus, the type, etc. 30
5. What are the requirements of Regulation (o), sub-section (8) of the Electrical Regulations regarding how often flexible cables are to be examined, etc.? 20
6. State the requirements of Regulation (j) of the Electrical Regulations regarding electricity being used at a pressure higher than Medium Pressure 20

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
May 27, 1947

MINE ELECTRICIANS' CERTIFICATES—FIRST CLASS

Marks obtainable 200.
Paper No. 2.

Marks required 120.
Time: Two hours.

THEORY

- | | Values |
|---|--------|
| 1. What size of wire, in circular mils, should be used to transmit 160 amperes a distance of 300 feet with 8 volts drop? (Direct Current) | 30 |
| 2. What would be the KVA capacity of two 50 KVA single phase transformers, connected Open Delta? | 30 |
| 3. How would you test a transformer to find out if it had Additive Polarity or Subtractive Polarity? | 40 |
| 4. Explain what is meant by the "Slip" of an induction motor and how does the Slip affect the torque of the motor? | 30 |
| 5. During the operation of a 6600 volt, 250 kilowatt synchronous motor, the instrument indications are as follows: Voltmeter 6000; Power Factor 80; Wattmeter 200 kilowatts. The normal current of the motor is 38 amperes. How much, if any, overload is the motor taking? | 40 |
| 6. Consider a 3 wire 110/220 volt system with a load of 6600 watts one one side and 4400 watts on the other side. What would be the current in the neutral wire? | 30 |

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
May 27, 1947

MINE ELECTRICIANS' CERTIFICATES—FIRST CLASS

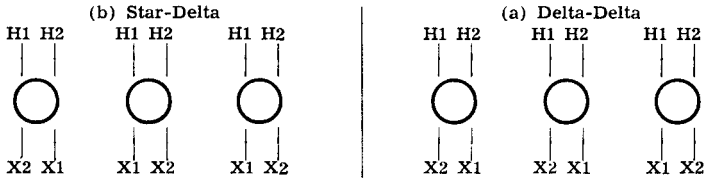
Marks obtainable 200.
Paper No. 3.

Marks required 120.
Time: Three and one-half hours.

PRACTICAL WORK

- | | Values |
|--|--------|
| 1. When choosing an induction motor for a machine or for a given load, would you advise getting a motor of just sufficient capacity, one slightly under capacity, or one of over capacity? By capacity is meant the rated horse power. Give reasons for your answer | 15 |
| 2. A coal cutting machine used on a three phase circuit has its controller taken off and the motor and controller leads are not marked; there are six leads brought out of the motor and the controller is of the Star-Delta type. Explain, using a sketch, how you would test out the leads to ascertain where each should go | 25 |
| 3. What would cause motors of the following types to overspeed:
Series Wound Direct Current;
Shunt Wound Direct Current? | 15 |
| 4. (a) Describe a simple test for determining the polarity of a Direct Current circuit; | 10 |
| (b) Give directions for preparing the electrolyte for lead cells, from strong sulphuric acid | 10 |
| 5. If you were called into a mine to examine a large squirrel cage motor and you find two stator coils have gone to ground or are burned out and the motor must be kept running if at all possible, describe fully what you would do in this case | 20 |

6. What precaution must be taken when removing an ammeter or relay that is supplied by a current transformer, the transformer to remain energized?..... 20
7. Draw the connections for banking three single phase transformers with markings as illustrated below:



- 25
8. The following alternating current motors are to be installed in a tippie or cleaning plant, with switches and motor starters installed in one switch room:
- 1-50 H.P., 440 volt motor, reduced voltage starter.
 - 1-30 H.P., 440 volt motor, reduced voltage starter.
 - 2-20 H.P., 440 volt motors, across the line starters.
 - 2-10 H.P., 440 volt motors, across the line starters.
 - 2- 5H.P., 440 volt motors, across the line starters.
- Make a sketch showing how you would make this installation, stating or marking in on sketch the size of the following: Main switch; Main feeds and conduit; switch for each motor; conduit and wire for each motor 25
9. (a) Almost all trolley locomotives used in mines have two motors? Why do they have two motors instead of one large motor? 5
- (b) What is the usual type of winding in these motors?..... 5
- (c) Why are the two motors operated sometimes in series and sometimes in parallel and under what conditions would they be running in series and when in parallel? 10
10. Explain how you would find a short-circuited coil in a three phase, squirrel cage induction motor 15

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH

EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
May 27, 1947

MINE ELECTRICIANS' CERTIFICATES—SECOND CLASS

Marks obtainable 200.
Paper No. 1.

Marks required 100.
Time: Three and one-half hours.

THE COAL MINES REGULATION ACT

- Values
1. What are the requirements of Section 41 of The Coal Mines Regulation Act regarding the qualifications required before a Mine Electrician's Certificate can be granted? 10
2. What are the requirements of Section 50 of The Coal Mines Regulation Act regarding when an electrician must be appointed, exemptions provided for, offences, etc.? 30
3. State the requirements of Regulation (q) of the Electrical Regulations regarding shot-firing 15
4. State the requirements of Regulation (L) of the Electrical Regulations regarding where switches are required 25
5. Regulation (m) of The Coal Mines Regulation Act states that all cables, other than flexible cables, must comply with certain requirements. State these requirements 35
6. State the parts of Regulation (o) of the Electrical Regulations which refer to the duties of a Mine Electrician 30
7. State the requirements of Regulation (j) of the Electrical Regulations regarding where electricity is distributed at a pressure higher than Medium Pressure 10
8. State the requirements of Regulation (p) of the Electrical Regulations regarding part of a mine where gas or coal-dust is liable to occur 25
9. What does Regulation (t) of the Electrical Regulations say regarding electric locomotives? 5
10. What are the requirements of Regulation (g) of the Electrical Regulations regarding apparatus and conductors, their installation, protection, etc.?..... 15

GOVERNMENT OF THE PROVINCE OF ALBERTA
MINES BRANCH
EXAMINATIONS UNDER THE COAL MINES REGULATION ACT
May 27, 1947

MINE ELECTRICIANS' CERTIFICATES—SECOND CLASS

Marks obtainable 200.

Marks required 100.

Paper No. 2.

Time: Three and one-half hours.

Values.

THEORY AND PRACTICAL WORK

1. Why is it necessary to run all wires of an alternating current circuit in the same conduit? 15
2. How would you reverse the rotation of a Series Wound Direct Current motor? .. 15
3. Make a sketch of a return call signal system as used in a slope. There are four levels with a bell and push button on each level, and bell and push button in the hoist room. All bells are to ring simultaneously when any button is pushed 25
4. A 250 volt direct current motor draws 40 amperes at full load. What is the horse power of the motor? 20
5. An alternating current motor, which has been working satisfactorily for some time, starts to run hot. What troubles would you look for and what tests would you make? 20
6. Make a sketch of two three-way switches controlling a light from two different points 20
7. The main fuses protecting a circuit are continually burning off, the fuses have a rating of ample capacity for the load. What would likely be the cause? ... 20
8. (a) Discuss the type of wiring and apparatus, for power and lighting that should be installed in dusty locations such as are sometimes found in tipples or cleaning plants 15
- (b) Describe a common electric cap lamp used by miners and explain its safety features 10
9. (a) Why are running fuses or overload relays required in induction motor circuits, in addition to the main fuses? 10
- (b) Why is automatic low voltage protection required in motor circuits? ... 10
10. What size of switch and fuses would you install ahead of an across-the-line starter, when installing a 20 horse power, 220 volt squirrel cage motor? ... 20

LIST OF TRADE NAMES UNDER WHICH COAL IS SOLD, FROM MINES
OPERATING AS AT DECEMBER 31, 1947

Mine No.	Name of Operator	Registered Trade Name	Address
Ardley Area:			
809	J. W. Sissons	Pearl of Furnace Coal	Alix
969	James Blades	Great Bend Coal	Delburne
1018	Arne Anderson	Dixie Coal	Ardley
1135	B. C. Kurp	Kurp's Coal	Delburne
1322	John Lynass	Glenniffer Coal	Delburne
1488	Chas. M. Russell	Eclipse Coal	Alix
1586	Kehl & McGladrie	Valley Coal	Nevis
1605	Meyers & Munro	Shurheat Coal	Ardley
1613	Wm. Barrel & Auvigne	B. and A. Coal	Ardley
1662	W. S. Underwood	Red Deer River Coal	Ponoka
1663	Wm. G. Martin	Martin Coal	Delburne
Big Valley Area			
864	Big Valley Coal Company	Quality Coal	Big Valley
1254	Robert Campkin	Thompson Coal	Lousana
1661	Robert Campkin & Sons	The Campkin Mine Coal	Lousana
Brooks Area			
1404	Birnwell Coal Limited	Birnwell Coal	Eyremore
Camrose Area			
241	Joe Proskow	Proskow Coal	Dinant
610	L. Strliczyk	L. Strliczyk Coal	Ohaton
724	S. H. Burnstad	Burnstad's Coal	Ohaton
1420	Red Flame Coal Co. Ltd.	Red Flame Coal	Round Hill
1524	Geo. Shute & Partners	Demay Colls. Coal	Dinant
1603	Alberta Coal Co. Ltd.	Camcoal	Camrose
Carbon Area			
53	A. Fox	Carbon Sunrise Coal	Carbon
194	Kneehill Coal Co. Ltd.	Kneehill Coal	Three Hills
384	Inland Coal Co. Ltd.	Kneehill Valley Coal	Three Hills
690	J. W. Rynning	Ant Hill Coal	Rowley
710	East Trochu Coal Mine	Troalta Coal	Trochu
817	Ben Pickering	Orkney Coal	Ghost Pine Creek
921	Eric Reissig	Meadow Bank Coal	Trochu
1060	East Carbon Coal Co.	Reliable Coal	Carbon
1226	C. C. Campbell	Campbell Coal	Trochu
1283	A. E. Staite	Antler Coal	Trochu
1359	Balogh Bros.	Arctic Coal	Carbon
1499	Nuttal & Davidson	Fire King Coal	Three Hills
1600	Peerless Coal Co.	Peerless Carbon Coal	Carbon
1621	M. E. Morel	Black Jewel Coal	Ghost Pine Creek
Cascade Area			
2	The Canmore Mines Ltd.	Canmore Smokeless Coal	Canmore
2	The Canmore Mines Ltd.	Canmore Briquettes	Canmore
1244	Frank Wheatley & Sons	Wheatley Bros. Coal	Banff
1667	Kananaskis Exploration & Development Co. Ltd.	Cascade Coal	Nordegg
Castor Area			
251	Joe Tyrlik	Diamond G Coal	Heisler
289	Bailey & Strader	Gadsby Blue Blaze	Gadsby
291	James Chiswick	Sunset Coal	Gadsby
447	J. R. James & E. J. Boyce	Ever Ready Coal	Forestburg
615	Komperdo & Partners	Riverside Coal	Heisler
666	Killam Manufacturing Co. Ltd.	K. M. Coal	Forestburg
902	O. V. Remillard	Remillard Coal	Castor
911	Strickland & Partners	Palace Coal	Heisler
913	Ben Hronek	Big Ben Coal	Halkirk
953	D. H. Wiltse & Krammer	Battle River Coal	Forestburg
1046	Filipenko Brothers	Battle River Coal Syndicate	Halkirk
1062	Chas. Strader	Esperanze Coal	Halkirk
1232	J. H. Ainsworth	Ainsworth Coal	Halkirk
1237	Davies & Doan	Ruby Glow Coal	Halkirk
1240	G. Stoller & J. Filipenko	Bentonite	Castor
1248	Thomas Mitchinson	Mitchinson Coal	Donalda
1417	James Easton	Burn-Rite Coal	Castor
1435	E. Lien	Rosebush Coal	Edberg
1441	J. W. Marshall	Marshall Coal	Donalda
1541	H. C. Muncy	Easter Gem Coal	Foreman
1572	Alvin Annonson & J. Radford	Black Eagle Coal	Donalda
1578	Bish Bros.	Bish Coal	Forestburg
1587	J. J. Mills	Eagle Coal	Heisler
1608	Castor Coal & Construction Co.	Tower Coal	Castor
1614	A. Sorken	Radar Coal	Killam
1634	F. N. Wiltse	Canyon Mine Coal	Halkirk
1639	A. T. Miner	Miner's Coal	Rosalind
1642	J. Bradley & A. O'Brien	Active Coal	Halkirk
1650	Wm. Jones	Mother's Pride Coal	Forestburg
1665	C. R. Grettum & M. J. Sand	Edberg Coal	Edberg

Mine No.	Name of Operator	Registered Trade Name	Address
Champion Area			
136	George Rhodes	Therriault Coal	Champion
1509	P. Fontana & Sons	Champion Coal	Champion
1565	Mike Popovich	Ellis Coal	Champion
Coalspur Area			
769	Sterling Coll. Ltd.	Sterling Coal	Sterco
771	Foothills Collieries Ltd.	Foothills Coal	Foothills
775	Lakeside Coals Ltd.	Balkan Coal	Robb
775	Lakeside Coals Ltd.	Minehead Inferno Coal	Robb
846	McLeod River Hard Coal Co. (1941) Ltd.	McLeod River Hard Coal	Mercoal
1002	Coal Valley Mining Co. Ltd.	Cova Coal	Coal Valley
1157	Bryan Hard Coal Co. Ltd.	Bryan Mountain Hard Coal	Robb
Crowsnest Area			
87	West Canadian Coll. Ltd.	Bellevue Coal	Bellevue
88	International Coal and Coke Co. Ltd.	International Coal	Coleman
133	Hillcrest Mohawk Coll. Ltd.	Hillcrest Mohawk Coal	Bellevue
199	M. Wood	Beaver Mine	Beaver Mines
204	McGillivray Creek Coal & Coke Co. Ltd.	McGillivray Creek Coal	Coleman
396	West Canadian Coll. Ltd.	Greenhill Coal	Blairmore
1584	West Canadian Coll. Ltd.	Adanac Coal	Bellevue
1623	T. O. Neumann	Miridian Mine Coal	Pincher Creek
Drumheller Area			
346	Rosedale Collieries Ltd.	Rosedale Coal	Rosedale
367	Midland Coal Mining Co. Ltd.	Midland Coal	Drumheller
367	Midland Coal Mining Co. Ltd.	Mercury Coal	Drumheller
402	Red Deer Valley Coal Co. Ltd.	Glecoal	Drumheller
422	Commander Coal Co. Ltd.	Commander Coal	Drumheller
436	Rosedale Collieries Ltd.	Star Coal	Aerial
620	Newcastle Collieries Ltd.	Newcastle Coal	Drumheller
728	Maple Leaf Minerals Ltd.	National Coal	Drumheller
1117	O. W. Whittaker	Hi-heat Coal	Beynon
1258	Brilliant Coal Co. Ltd.	Brilliant Coal	Drumheller
1299	Saskatchewan Federated Co-operatives Ltd.	Empire Coal	East Coulee
1421	Hy-Grade Coal Mining Co. Ltd.	Hy-Grade Coal	Drumheller
1436	H. Burton	Royalty Coal	Drumheller
1484	Regal Coal Co. Ltd.	New Wildfire Coal	Drumheller
1491	Murray Collieries Ltd.	New Murray Coal	Drumheller
1493	Western Gem & Jewel Coll. Ltd.	Cambrian Coal	Cambria P.O.
1511	Aetna Coal Co.	Aetna Coal	Wayne
1515	H. S. Chambers	Foye's Coal	Willow Creek
1520	The Minute Coal Co.	Good Quality Coal	Drumheller
1544	Wayne Cooperatives Assoc. Ltd.	Castle Coal	Wayne
1570	Wayne Coal Co. Ltd.	Sovereign Coal	Wayne
1573	Monarch Coal Mining Co. Ltd.	Western Monarch Coal	Drumheller
1583	John Hamilton	Reliance Coal	Delia
1589	Arcadia Coal Mines Ltd.	Purity Hard Coal	Willow Creek
1599	Burn-Brite Coal Co. Ltd.	Burn-Brite Coal	Drumheller
1655	Wm. Oschazchan	Munson Hill Coal	Drumheller
1660	John S. Hackler	Ball Coal	Wayne
1666	Allan Livingstone	Livingstone Coal	Nacmine
Edmonton Area			
29	E. Woytowich & M. Senetchko	Excel Coal	South Edmonton
91	Ottewell Coal Co.	Clover Gem Coal	Clover Bar
99	Great West Coal Co. Ltd.	Black Diamond Coal	Clover Bar
129	Sundance Mines Ltd.	Suncole	Cardiff
428	Banner Coals Ltd.	Penn Coal	Carbondale
1034	Black Point Coal Co. Ltd.	Black Point Coal	South Edmonton
1098	Long Coal Co. Ltd.	Hardite Coal	Namao
1266	Edmonton Coll. Ltd.	New Black Gem Coal	Namao
1316	Samis Collieries Ltd.	Samis Coal	Namao
1357	Red Hot Coal Co. Ltd.	Red Hot Coal	Edmonton
1366	Beverly Coal Ltd.	Beverly Coal	Beverly
1393	Ottewell Coal Co. Ltd.	Marvel Coal	Clover Bar
1419	Pine Creek Mine	Pine Creek Coal	South Edmonton
1463	Riverdale Coal Co. Ltd.	Dependable Coal	Edmonton
1496	G. S. Gwilliam	Black Beauty Coal	Namao
1560	N. Nimko	White Mud Creek Coal	South Edmonton
1582	Egg Lake Coal Co. Ltd.	Egg Lake Coal	Morinville
1626	J. B. Starky Co. Ltd.	Star-Key Coal	Carbondale
1627	Carbondale Collieries Ltd.	Carbondale Coal	Carbondale
1628	Blue Point Mine	Blue Point Coal	South Edmonton
1632	C. F. MacLachlan	Beaver Hills Coal	Edmonton
1635	Morinville Collieries Ltd.	Spittfire Coal	Cardiff
1636	J. B. St. Martin	Legal Coal	Legal
1641	A. Horkulak	Rabbit Hill Coal	South Edmonton
1646	J. G. Mucha	Bright Service Coal	South Edmonton
1658	Opalinski & Klapstein	Ellerslie Coal	Ellerslie

Mine No.	Name of Operator	Registered Trade Name	Address
Gleichen Area			
72	Blackfoot Indians		Gleichen
299	K. J. Schnepf	Bright Hard Coal	Rosebud
1265	H. Castella & Son	Standard Coal	Standard
1431	John Guiney	Consumer's Coal	Rosebud
1521	Wm. McMillan	Supreme of the Valley Coal	Rosebud
Halcourt Area			
651	Baldwin Collieries	Globe Coal	Grande Prairie
1588	Dahl & Cage	Hillside Coal	Halcourt
1633	Wm. Fraser	Fraser Coal	Halcourt
1647	R. O. Johnston	Big Mountain Creek Coal	Grande Prairie
1651	C. D. Grubb	Aspen Dale Coal	Hualien
Highwood Area			
1625	Allied Industrials Ltd.		Turner Valley
1638	E. Payne	E. P. Coal	Turner Valley
Lethbridge Area			
56	A. Rozzolini	The Baker Coal	Magrath
738	George Rollingson	Whoopup Coal	Lethbridge
1095	Chester Mine	Royal Coal	Lethbridge
1263	Lethbridge Coll. Ltd.	Cadillac Coal	Shaughnessy
1464	Lethbridge Coll. Ltd., No. 8	Galt Coal	Lethbridge
1581	J. J. Hamilton Coal Co. Ltd.	Federal Coal	Lethbridge
1602	Vulcan Mining & Contracting Co.	Vulcan Coal	Vulcan
Milk River Area			
1301	Thomas Taylor	New Benwell Coal	Groton
1380	Lucky Strike Coal Co. Ltd.	Kippenkoal	Masnasin
1659	F. W. Duggan	Vikol	Milk River
Morley Area			
1619	B. Ainsley & Son	Fire Cloud Coal	Morley
Mountain Park Area			
282	Mountain Park Coals Ltd.	Mountain Park Coal	Mountain Park
693	Cadomin Coal Co. Ltd.	Cadomin Coal	Cadomin
693	Cadomin Coal Co. Ltd.	Rocky Mountain Splint Coal	Cadomin
905	Luscar Coals Ltd.	Luscar Coal	Luscar
1392	Gregg River Collieries Ltd.	Gregg River Coal	Gregg River
1631	King Coals Ltd.	King Coal	Cadomin
Nordegg Area			
256	Brazeau Collieries Ltd.	Brazeau Bituminous Steam Coal	Nordegg
Pakowki Area			
1318	W. Raeder	Elkwater Coal	Elkwater
Pekisko Area			
1516	G. C. Davies	O.V. Coal	Priddis
Pembina Area			
419	Lakeside Coals Ltd.	Victory Coal	Wabamun
1409	Gainford Collieries (1946) Ltd.	Gain-Heat Coal	Gainford
1495	Pembina Coll. Ltd.	Pembina Peerless Coal	Entwistle
1592	Donvie Collieries Ltd.	Sunburst Coal	Gainford
1592	Donvie Collieries Ltd.	Goose Quill Coal	Gainford
1596	Wm. Robinson	Robinson's Coal	Entwistle
1630	Lake Isle Mine	Lake Isle Coal	Gainford
1645	Lothian Collieries Ltd.	Blue Flame Coal	Wabamun
1649	K. Schon	Rocky Rapid Coal	Moon Lake
1652	Fry & Larson	Coral Coal	Seba Beach
1657	J. Lidgett & L. Opheim	O. & L. Coal	Entwistle
Pincher Area			
59	Keith Coal Co.	Red Devil Coal	Lundbreck
1440	W. B. Rhodes	Quick Flame Coal	Lundbreck
Prairie Creek Area			
1653	C. M. Woodley & Partners	Red Glow Coal	Hinton
Redcliff Area			
772	Maco Coal Co. Ltd.	Ajax Coal	Medicine Hat
Saunders Area			
388	Bighorn & Saunders Creek Coll. Ltd.	Bighorn & Saunders Creek Coal	Saunders
852	Alexo Coal Co. Ltd.	Alexo Coal	Alexo
852	Alexo Coal Co. Ltd.	Acorn Saunders Coal	Alexo

Mine No.	Name of Operator	Registered Trade Name	Address
Sheerness Area			
443	Chinook Coal Co. Ltd.	Sheerness Chinook Coal	Sheerness
486	Litke Bros.	Superior Coal	Hanna
1314	C. Gaetz	Gowan Coulee Coal	Hanna
1398	Ironside & Glover	Ironside Coal	Scapa
1401	F. M. Pahl	Eureka Coal	Hanna
1432	Sheerness Coal Co. Ltd.	Sheebo Coal	Sheerness
1553	Masciangelo & Partners	Blossom Mine Coal	Della
1597	Bordula & Partners	Bordula Coal	Hanna
Taber Area			
672	J. Annon	Leland Coal	Bow Island
838	D. McCracken & Goring	Sunny South Coal	Alderson
1334	Continental Coal Corporation Ltd.	Alburna Coal	Grassy Lake
1536	Oliver Coal Mines	Oliver Senior Coal	Taber
1604	Southern Alberta Coal Co. Ltd.	Southalta Coal	Taber
1609	Southern Alberta Coal Co. Ltd.	Southalta Coal	Taber
Tofield Area			
215	Emil Skarin	North Star Coal	Dodds
252	Tofield Coal Co. Ltd.	Headlight Coal	Tofield
1107	Black Nugget Coal Co. Ltd.	Hi Lo Coal	Dodds
1206	Ryley Coal Co.	Ryley Coal	Ryley
1624	C. Binder	Ryalta Coal	Ryley
Westlock Area			
1517	Thorhild Coal Co.	Dandy Coal	Thorhild
1523	Picardville Coal Co.	Picardville Coal	Picardville
1562	Tomlinson & Kaszuba	The North Point Coal	Thorhild
Wetaskiwin Area			
1534	Peter Gill	Lake Centre Coal	Thorsby
1656	P. J. Offroy	Canyon Creek Coal	Thorsby
Whitecourt Area			
1569	A. Watson	Blue Ridge Coal	Blue Ridge
1612	R. R. Pritchard	Burnwell Coal	Blue Ridge
No Area			
1616	Pinto Creek Coal Co. Ltd.	Pinto Creek Coal	Wembley

PARTICULARS OF OPERATING MINES IN THE VARIOUS AREAS

ARDLEY AREA

J. W. Sissons—Mine No. 809

Mine Office: Alix, Alberta.
 Mine Manager: Clive Sissons.
 Mine Surveyor: Robert Hamilton.
 Overman: Clive Sissons.
 Thickness of Seam: 5 feet.
 Thickness of Cover: Approx. 60 feet.
 Coal Mining Lease Number: C.P.R. 475.
 Truck mine.
 Form of Opening: Stripping mine.
 Registered Trade Name: Pearl of Furnace
 Location of Mine: L.S. 15 and 16, Sec. 33,
 Tp. 38, Rge. 23, West 4th Mer.

James Blades—Mine No. 969

Mine Office: Delburne, Alberta.
 Mine Manager: James Blades.
 Mine Surveyor: L. C. Stevens.
 Overman: James Blades.
 Thickness of Seam: 3½ ft.
 Thickness of Cover: 50 ft. to 100 ft.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 6 ft. by 6 ft. Depth of Slope: 80 feet.
 Location of Mine: L.S. 14, Sec. 10, Tp. 38,
 Rge. 22, West 4th Mer.
 Coal Mining Lease Number: C.P.R. 585.
 Truck mine.
 Registered Trade Name: Great Bend
 Coal.

A. Johnson—Mine No. 1018

Mine Office: Ardley, Alberta.
 Mine Manager: Arne Anderson.
 Mine Surveyor: David Jones.
 Overman: A. Johnson.
 Thickness of Seam: 5½ feet.
 Thickness of Cover: 30 to 100 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift. Size of Drift:
 6 ft. by 7 ft.
 Location: L.S. 3, Sec. 17, Tp. 38, Rge. 23,
 W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 274.
 Truck mine.
 Registered Trade Name: Dixie Coal.

Carl Kurp—Mine No. 1135

Mine Office: Delburne, Alberta.
 Mine Manager: Carl Kurp.
 Mine Surveyor: David Jones.
 Overman: Carl Kurp.
 Thickness of Seam: 4 feet.
 Thickness of Cover: 55 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Entry. Size of Entry:
 6 ft. by 6 ft.
 Location of Mine: L.S. 4, Sec. 7, Tp. 38,
 Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 11.
 Truck mine.
 Registered Trade Name: Kurp's Coal.

John Lynass—Mine No. 1322

Mine Office: Delburne, Alberta.
 Mine Manager: J. Lynass.
 Mine Surveyor: David Jones.
 Overman: John Lynass.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 200 feet.
 Inclination of Seam: Horizontal.
 Location of Mine: L.S. 16, Sec. 7, Tp. 38,
 Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 614.
 Truck mine.
 Registered Trade Name: Glenniffer Coal.

Chas. M. Russell—Mine No. 1488

Mine Office: Alix, Alberta.
 Mine Manager: C. M. Russell.
 Mine Surveyor: David Jones.
 Overman: C. M. Russell.
 Thickness of Seam: 5 ft. 6 in.
 Thickness of Cover: 50 to 75 ft.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.

Location of Mine: L.S. 3, Sec. 29, Tp. 38,
 Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: S.L. 512.
 Truck mine.
 Registered Trade Name: Eclipse Coal
 Mine.

Kehl & McGladrie—Mine No. 1586

Mine Office: Nevis, Alberta.
 Mine Manager: I. F. Kehl.
 Mine Surveyor: David Jones.
 Overman: Robert McGladrie.
 Thickness of Seam: 4 ft. 6 in.
 Thickness of Cover: 75 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 6 ft. by 6 ft. Depth of Slope: 135 feet.
 Location of Mine: L.S. 5, Sec. 35, Tp. 37,
 Rge. 22, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 582.
 C.N.R. and Truck mine.
 Registered Trade Name: Valley Mine.

Myers & Munro—Mine No. 1605

Mine Office: Ardley, Alberta.
 Mine Manager: S. S. Munro.
 Mine Surveyor: David Jones.
 Overman: S. S. Munro.
 Thickness of Seam: 4 ft. 1½ in.
 Thickness of Cover: 3 feet.
 Inclination of Seam: Horizontal.
 Location of Mine: L.S. 12, Sec. 35, Tp. 38,
 Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 634.
 Truck mine.
 Registered Trade Name: Shurheat Coal.

**William Barrell & A. Auvigne—
Mine No. 1613**

Mine Office: Ardley, Alberta.
 Mine Manager: Wm. Barrell.
 Mine Surveyor: David Jones.
 Overman: W. Barrell.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 100 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 10, Sec. 20, Tp. 38,
 Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: 5484.
 Truck mine.
 Registered Trade Name: B & A Coal.

W. S. Underwood—Mine No. 1662

Mine Office: Ponoka, Alberta.
 Location of Mine: W. ½ L.S. 15, 10, 9,
 Sec. 10, Tp. 38, Rge. 22, West 4th Mer.
 Registered Trade Name: Red Deer River
 Coal.
 New mine just opened; no particulars.

Wm. G. Martin—Mine No. 1663

Mine Office: Delburne, Alberta.
 Location of Mine: E. ½ 15, W. ½ 16,
 L.S. 16, Sec. 22, Tp. 37, Rge. 22, West
 4th Mer.
 Registered Trade Name: Martin Coal.
 New mine just opened; no particulars.

BIG VALLEY AREA

Big Valley Coal Co.—Mine No. 864

Mine Office: Big Valley, Alberta.
 Mine Manager: J. Conlin.
 Mine Surveyor: David Jones.
 Overman: J. Conlin.
 Thickness of Seam: 9 feet.
 Thickness of Cover: 15 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 7 feet. Depth of Slope: 6 feet.
 Location of Mine: L.S. 16, Sec. 26, Tp.
 35, Rge. 20, W. 4th Mer.
 Coal Mining Lease Number: H.B.C.
 Truck and C.N.R. Mine.
 Registered Trade Name: Quality Coal.

Robert Campkin—Mine No. 1254

Mine Office: Lousana, Alberta.
 Mine Manager: B. Campkin.
 Mine Surveyor: David Jones.
 Overman: B. Campkin.
 Form of Opening: Level, 5ft. by 6 ft.
 Location of Mine: S.W. $\frac{1}{4}$ L.S. 16, Sec. 12, Tp. 36, Rge. 22, W. 4th Mer.
 Coal Mining Lease Number: 5605.
 Truck mine.
 Registered Trade Name: Thompson Coal.

Robert Campkin & Sons—Mine No. 1661

Mine Office: Lousana.
 Location of Mine: L.S. 1, Sec. 23, Tp. 36, Rge. 22, West 4th Mer.
 Coal Mining Lease Number: 5605.
 Registered Trade Name: The Campkin Mine.
 New mine just opened; no particulars.

BROOKS AREA**Kleenbirn Collieries Ltd.—Mine No. 1404**

Authorized Capital: \$250,000.00.
 Name of President: J. G. Westgate.
 Names of Directors: R. M. Balfour, O. B. Whitman, J. G. Westgate.
 Name of Secretary: O. B. Whitman.
 Name of Treasurer: O. B. Whitman.
 Mine Office: Eyremore.
 Mine Manager: Geo. A. Wiggan.
 Mine Surveyor: Galbraith & Williams.
 Overman: E. O. Cragg.
 Fireboss: E. Herrick.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 40 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: Sec. 15, Tp. 17, Rge. 17, W. 4th Mer.
 Coal Mining Lease: C.P.R.
 C.P.R. and Truck mine.
 Registered Trade Name: Birnwel Coal

CAMROSE AREA**Joe Proskow—Mine No. 241**

Mine Office: Dinant, Alberta.
 Mine Surveyor: David Jones.
 Overman: J. Proskow.
 Thickness of Seam: 6ft. 6in.
 Thickness of Cover: 18 to 20 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 4, Sec. 18, Tp. 48, Rge. 19, W. 4th Mer.
 Coal Mining Lease Number: M.S. 995.
 Truck mine.
 Registered Trade Name: Proskow Coal Mine.

L. Strilczyk—Mine No. 610

Mine Office: Ohaton, Alberta.
 Mine Surveyor: David Jones.
 Overman: L. Strilczyk.
 Thickness of Seam: 4 feet.
 Thickness of Cover: 18 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 8, Sec. 10, Tp. 48, Rge. 18, W. 4th Mer.
 Truck mine.
 Registered Trade Name: L. Strilczyk.
 Coal Mining Lease Number: 5249.

S. H. Burnstad—Mine No. 724

Mine Office: Ohaton.
 Mine Surveyor: D. Jones.
 Overman: S.H. Burnstad.
 Thickness of Seam: 5ft. 8in.
 Thickness of Cover: 20 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: N. & S. $\frac{1}{2}$, L.S. 3,

Sec. 14, Tp. 48, Rge. 18, West 4th Meridian.
 Coal Mining Lease Number: 5525.
 Truck and C.P.R.
 Registered Trade Name: Burnstad Coal Mine.

Red Flame Coal Co., Ltd.—Mine No. 1420

Authorized Capital: \$20,000.
 Name of President: Alexander Russell.
 Name of Directors: Alex. Russell and Robert Shortreed.
 Name of Secretary: Robert Shortreed.
 Mine Office: Round Hill, Alberta.
 Mine Manager: M. D. McLean.
 Mine Surveyor: David Jones.
 Overman: W. V. Gotheridge.
 Fireboss: F. Gotheridge.
 Thickness of Seam: 6 feet.
 Inclination of Seam: South and West.
 Thickness of Cover: 100 feet.
 Form of Opening: Slope.
 Location of Mine: L.S. 14, Sec. 19, Tp. 48, Rge. 18, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 467A.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Red Flame Coal Co. Ltd.

Geo. Shute & Partners—Mine No. 1524

Mine Office: Dinant, Alberta.
 Mine Surveyor: David Jones.
 Overman: Geo. Shute.
 Thickness of Seam: 5ft. 6in.
 Thickness of Cover: 16 to 20 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 8 and 9, Sec. 7, Tp. 48, Rge. 19, West 4th Mer.
 Coal Mining Lease Number: C.P.R. 546.
 Truck mine.
 Registered Trade Name: Demay Collieries.

Alberta Coal Co. Ltd.—Mine No. 1603

Authorized Capital: \$200,000.
 Name of President: D. Twomey.
 Names of Directors: Fred Mannix Jr., E. Costello, E. Connelly, D. Twomey.
 Name of Secretary: E. Costello.
 Name of Treasurer: E. Connelly.
 Head Office: 332 7th Ave. West, Calgary, Alberta.
 Mine Office: Camrose, Alberta.
 General Manager: D. Twomey.
 Mine Manager: R. B. Munn.
 Mine Surveyor: A. E. Williams.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 24 feet.
 Form of Opening: Strip pit.
 Location of Mine: L.S. 2 and 7, Sec. 29, Tp. 46, Rge. 19, W. 4th Mer.
 Coal Mining Lease Number: S.L. 529 and 5631.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Camcoal.

CARBON AREA**A. Fox—Mine No. 53**

Mine Office: Carbon, Alberta.
 Mine Manager: Alfred Fox.
 Mine Surveyor: David Jones.
 Overman: A. Fox.
 Thickness of Seam: 3ft. 10in.
 Thickness of Cover: 150 feet.
 Inclination of Seam: Horizontal.
 Location of Mine: L.S. 3, Sec. 14, Tp. 29, Rge. 23, W. 4th Mer.
 Truck mine.
 Registered Trade Name: Carbon Sunrise Coal.

Kneehill Coal Co.—Mine No. 194

Authorized Capital: \$500,000.00.
 Name of President: P. D. McArthur.
 Name of Directors: N. J. Christie, E. McBride, Mrs. C. A. Stuart, R. Stuart.

Name of Sec.-Treas.: F. Tempest.
 Head Office: 22 Travellers' Building,
 Calgary.
 Mine Office: Box 47, Carbon, Alberta.
 Mine Manager: A. A. McArthur.
 Mine Surveyor: J. J. McAuley.
 Overman: A. A. McArthur.
 Thickness of Seam: 4 feet.
 Thickness of Cover: 90 feet.
 Form of Opening: Strip Mine.
 Location of Mine: N. E. $\frac{1}{4}$ of Sec. 4,
 Tp. 31, Rge. 22, W. of 4th Mer.
 C.P.R. and Truck mine.
 Registered Trade Name: Knee Hill Coal.

Inland Coal Co., Ltd.—Mine No. 384

Authorized Capital: \$20,000.
 Name of President: W. J. Nesbitt.
 Name of Directors: W. J. Nesbitt, R. B.
 Watson.
 Name of Sec.-Treas.: R. D. Watson.
 Head Office: 804 McLeod Bldg., Edmon-
 ton, Alberta.
 Mine Office: Three Hills, Alberta.
 General Manager: W. J. Nesbitt.
 Mine Manager: B. Nugent.
 Mine Surveyor: R. T. Stewart.
 Fireboss: Pete Gorge.
 Thickness of Seam: 4ft. 8in.
 Thickness of Cover: 140-168 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft:
 12 by 8 ft. Depth of Shaft: 168 ft.
 Location of Mine: L.S. 3, Sec. 36, Tp. 31,
 Rge. 24, W. 4th. Mer.
 Coal Mining Lease Number: M.S. 635.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Knee Hill.

Ant Hill Coal Co.—Mine No. 690

Mine Office: Rowley, Alberta.
 Mine Surveyor: David Jones.
 Overman: Jas. W. Rynning.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 103 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 4, Sec. 13, Tp. 32,
 Rge. 21, W. 4th. Mer.
 Coal Mining Lease Number: 5302.
 Truck mine.
 Registered Trade Name: Ant Hill Coal.

East Trochu Coal Co.—Mine No. 710

Name of President: Lloyd G. Yard.
 Name of Directors: T. G. Yard, J. A.
 Patterson.
 Name of Sec.-Treas.: J. A. Patterson.
 Mine Office: Trochu, Alberta.
 Mine Manager: Lloyd Geo. Yard.
 Mine Surveyor: David Jones.
 Overman: Lloyd Geo. Yard.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 90 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: S.E. $\frac{1}{4}$ L.S. 9, Sec. 14,
 Tp. 33, Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: 5320.
 C.N.R. and Truck mine.
 Registered Trade Name: Troalta Coal.

B. Pickering & Sons—Mine No. 817

Authorized Capital: \$3,000.00.
 Mine Office: Ghost Pine Creek, Alberta.
 Mine Manager: B. Pickering.
 Thickness of Seam: 5ft. 6in.
 Thickness of Cover: 50 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 6ft. by 6ft. Depth of Slope: 100 ft.
 Location of Mine: L.S. 1 and 2, Sec. 6,
 Tp. 31, Rge. 21, West of 4th Mer.
 Coal Mining Lease Number: 5510.
 Truck mine.
 Registered Trade Name: Orkney Coal.

Meadow Bank Coal Mine—Mine No. 921

Mine Office: Trochu, Alberta.
 Mine Manager: E. Reissig.
 Mine Surveyor: David Jones.

Overman: E. Reissig.
 Thickness of Seam: 5ft. 2in.
 Thickness of Cover: 85 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 5ft. by 7 ft.
 Location of Mine: L.S. 15, Sec. 14, Tp.
 33, Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: 5464.
 Truck mine.
 Registered Trade Name: Meadow Bank
 Coal.

East Carbon Coal Co. Ltd.—Mine No. 1060

Mine Office: Carbon, Alberta.
 Mine Manager: Ben Fox.
 Mine Surveyor: David Jones.
 Overman: Ben Fox.
 Thickness of Seam: 4ft. 3in.
 Thickness of Cover: 200 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft:
 6ft. by 7 ft. Depth of Shaft: 100 ft.
 Location of Mine: L.S. 12 and 13, Sec. 7,
 Tp. 29, Rge. 22, West of 4th Mer.
 Coal Mining Lease Number: C.L.S. 255.
 C.P.R. and Truck mine.
 Registered Trade Name: Reliable Coal.

C. C. Campbell—Mine No. 1226

Authorized Capital: \$1,200.00.
 Mine Office: Trochu, Alberta.
 Mine Manager: C. C. Campbell.
 Mine Surveyor: L. C. Stevens.
 Overman: C. C. Campbell.
 Thickness of Seam: 5ft. 4in.
 Thickness of Cover: 100 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 9, Sec. 29, Tp. 33,
 Rge. 22, W. 4th Mer.
 Coal Mining Lease Number: S.L. 278.
 Truck mine.
 Registered Trade Name: Campbell's Coal.

Antler Coal Co.—Mine No. 1283

Mine Office: Trochu, Alberta.
 Mine Manager: A. E. Staitte.
 Mine Surveyor: David Jones.
 Thickness of Seam: 5ft. 9in.
 Thickness of Cover: 97 feet.
 Inclination of Seam: 2 degrees.
 Form of Opening: Slope. Size of Slope:
 5ft. by 6ft. Depth of Slope: 150 feet.
 Location of Mine: L.S. 8, Sec. 14, Tp. 33,
 Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: L283.
 Registered Trade Name: Antler Coal.

Arctic Coal Co.—Mine No. 1359

Authorized Capital: \$10,000.00.
 Mine Office: Carbon, Alberta.
 Mine Manager: A. Balogh.
 Mine Surveyor: David Jones.
 Overman: Aron Balogh.
 Thickness of Seam: 3ft. 8in.
 Thickness of Cover: 110 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 7ft. by 6ft. Depth of Slope: 125 ft.
 Location of Mine: L.S. 16, Sec. 12, Tp. 29,
 Rge. 23, W. 4th. Mer.
 Coal Mining Lease Number: 234M.
 C.P.R. and Truck mine.
 Registered Trade Name: Arctic Coal.

Nuttall & Davidson—Mine No. 1499

Mine Office: Three Hills, Alberta.
 Mine Manager: W. Davidson.
 Mine Surveyor: David Jones.
 Overman: W. Davidson.
 Thickness of Seam: 4½ feet.
 Thickness of Cover: 8 to 35 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 1, Sec. 9, Tp. 31,
 Rge. 22, W. 4th Mer.
 Coal Mining Lease Number: 5257.
 Truck mine.
 Registered Trade Name: Fire King Coal.

Peerless Coal Co.—Mine No. 1600

Mine Office: Carbon, Alberta.
 Mine Manager: Hugh Brown.
 Mine Surveyor: H. R. Brown.
 Overman: H. Brown.
 Thickness of Seam: 3ft. 9in.
 Thickness of Cover: 45 to 225 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 6ft. by 5ft. Depth of Slope: 214 ft.
 Location of Mine: L.S. 2, Sec. 15, Tp. 29,
 Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: S.L. 259.
 Truck mine.
 Registered Trade Name: Peerless Carbon
 Coal.

M. E. Morel—Mine No. 1621

Mine Office: Ghost Pine Creek, Alberta.
 Mine Manager: M. Morel.
 Mine Surveyor: David Jones.
 Overman: M. E. Morel.
 Thickness of Seam: 5½ feet.
 Thickness of Cover: 50 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 8, Sec. 10, Tp. 31,
 Rge. 22, W. 4th Mer.
 Coal Mining Lease Number: 5500.
 Registered Trade Name: Black Jewel
 Coal.

CASTOR AREA**Tyrlik Bros.—Mine No. 251**

Mine Office: Heisler, Alberta.
 Mine Manager: Joe Tyrlik.
 Mine Surveyor: David Jones.
 Overman: Joe Tyrlik.
 Thickness of Seam: 4ft. 10in.
 Thickness of Cover: 74 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 6ft. by 6ft. Depth of Slope: 40 ft.
 Location of Mine: S.W. ¼ L.S. 16, Sec.
 28, Tp. 42, Rge. 17, W. 4th Mer.
 Coal Mining Lease Number: 5520.
 Truck mine.
 Registered Trade Name: Diamond Coal.

Bailey & Strader—Mine No. 289

Mine Office: Gadsby, Alberta.
 Mine Manager: D. M. Strader.
 Mine Surveyor: David Jones.
 Overman: D. M. Strader.
 Thickness of Seam: 4 to 5 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 5ft. by 6ft. Depth of Slope: 135 ft.
 Location of Mine: N.W. ¼ of L.S. 11,
 Sec. 28, Tp. 39, Rge. 16, West of 4th
 Mer.
 Coal Mining Lease Number: 5230.
 Registered Trade Name: Gadsby Blue
 Blaze Coal.

James Chiswick—Mine No. 291

Mine Office: Gadsby, Alberta.
 Mine Manager: James Chiswick.
 Mine Surveyor: David Jones.
 Thickness of Seam: 4ft. 6in.
 Thickness of Cover: 10 to 35 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 5ft. by 6ft. Depth of Slope: 85 feet.
 Location of Mine: S. ½ L.S. 11, Sec. 28,
 Tp. 39, Rge. 16, W. 4th Mer.
 Coal Mining Lease Number: 5093.
 Registered Trade Name: Sunset Coal.

A. J. James—Mine No. 447

Mine Office: Forestburg, Alberta.
 Mine Manager: A. J. James.
 Mine Surveyor: David Jones.
 Overman: Ernest J. Boyce.
 Thickness of Seam: 7ft. 6in.
 Inclination of Seam: Horizontal.

Form of Opening: Strip mine.
 Location of Mine: L.S. 13, Sec. 28, Tp.
 40, Rge. 15, West of 4th Mer.
 Coal Mining Lease Number: 5416.
 Registered Trade Name: Ever Ready
 Coal.

Komperdo & Partners—Mine No. 615

Authorized Capital: \$10,000.00.
 Mine Office: Heisler, Alberta.
 Mine Manager: Steve Tury.
 Mine Surveyor: David Jones.
 Overman: Albert Williams.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 100 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 6ft. by 7ft. Depth of Slope: 45 ft.
 Location of Mine: S. ½ of L.S. 13, Sec.
 22, Tp. 42, Rge. 17, W. 4th Mer.
 Coal Mining Lease Number: 5429.
 C.N.R. and Truck mine.
 Registered Trade Name: Riverside Coal.

Killam Manufacturing Co., Ltd.—**Mine No. 666**

Mine Office: Forestburg, Alberta.
 Mine Surveyor: David Jones.
 Firebosses: Mr. Howlett, Mr. Osmack.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 16 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 16, Sec. 2, Tp. 41,
 Rge. 16, W. 4th Mer.
 Coal Mining Lease Number: 5448.
 Truck mine.
 Registered Trade Name: K.M. Coal.

O. V. Remillard—Mine No. 902

Mine Office: Castor, Alberta.
 Mine Surveyor: David Jones.
 Overman: O. V. Remillard.
 Thickness of Seam: 4ft. 5in.
 Thickness of Cover: 30 to 40 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 5ft. by 5ft. Depth of Slope: 90 ft.
 Location of Mine: L. S. 16, Sec. 33, Tp.
 37, Rge. 14, West of 4th Mer.
 Coal Mining Lease Number: C.P.R. 186.
 Truck mine.
 Registered Trade Name: Remillard Coal.

Strickland & Partners—Mine No. 911

Mine Office: Heisler, Alberta.
 Mine Manager: E. Dolanz.
 Mine Surveyor: David Jones.
 Overman: E. Dolanz.
 Thickness of Seam: 4½ feet.
 Thickness of Cover: 55 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 6ft. by 6ft. Depth of Slope: 140 feet.
 Location of Mine: L.S. 1, Sec. 33, Tp. 42,
 Rge. 17, W. 4th Mer.
 Coal Mining Lease: C.P.R.
 Truck mine.
 Registered Trade Name: Palace Coal.

Big Ben Coal Mine—Mine No. 913

Mine Office: Halkirk, Alberta.
 Mine Manager: Ben Hronek.
 Mine Surveyor: David Jones.
 Overman: Ben Hronek.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 90 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 7ft. by 7ft. Depth of Slope: 154 ft.
 Location of Mine: L.S. 1, Sec. 7, Tp. 39,
 Rge. 15, W. 4th Mer.
 Coal Mining Lease Number: 378 C.P.R.
 Truck mine.
 Registered Trade Name: Big Ben Coal.

Robinson Coal Mine—Mine No. 953

Mine Office: Forestburg, Alberta.
 Mine Manager: D. H. Wiltse.

Mine Surveyor: D. Jones.
 Thickness of Seam: 7 to 8 feet.
 Thickness of Cover: 20 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: N.E. $\frac{1}{4}$ of L.S. 1 and
 8, Sec. 32, Tp. 40, Rge. 15, West of 4th
 Meridian.
 Coal Mining Lease Number: 5479.
 Truck Mine.
 Registered Trade Name: Battle River
 Coal.

M. J. Filipenko—Mine No. 1046

Authorized Capital: \$10,000.00.
 Name of Secretary: M. J. Filipenko.
 Head Office: Stettler, Alberta.
 Mine Office: Halkirk, Alberta.
 Mine Manager: C. D. Borgland.
 Mine Surveyor: W. Jamieson.
 Thickness of Seam: 10 feet.
 Thickness of Cover: 35 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 6, Sec. 20, Tp. 40,
 Rge. 15, W. 4th Mer.
 Coal Mining Lease Number: 1132.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Battle River
 Coal Syndicate.

Chas. Strader & Sons—Mine No. 1062

Mine Office: Halkirk, Alberta.
 Mine Manager: Chas. Strader.
 Mine Surveyor: David Jones.
 Overman: Chas. Strader.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 90 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 4, Sec. 17, Tp. 39,
 Rge. 15, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 41.
 Truck mine.
 Registered Trade Name: Esperanze Coal.

J. H. Ainsworth—Mine No. 1232

Mine Office: Halkirk, Alberta.
 General Manager: John H. Ainsworth.
 Mine Surveyor: David Jones.
 Overman: J. H. Ainsworth.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 40 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 13, Sec. 25, Tp.
 40, Rge. 16, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 478.
 Truck mine.
 Registered Trade Name: Ainsworth Coal.

Davis & Doan—Mine No. 1237

Name of Treasurer: Earl Down.
 Mine Office: Halkirk, Alberta.
 Mine Manager: Roland Davis.
 Mine Surveyor: David Jones.
 Overman: Roland Davis.
 Thickness of Seam: 5½ feet.
 Thickness of Cover: 83 feet.
 Inclination of Seam: Horizontal.
 Location of Mine: L.S. 11, Sec. 8, Tp. 39,
 Rge. 15, West of 4th Mer.
 Coal Mining Lease: H.B.C.
 C.P.R. and Truck mine.
 Registered Trade Name: Ruby Glow
 Coal.

Stoller & Filipenko—Mine No. 1240

Mine Office: Castor, Alberta.
 Mine Manager: G. Stoller.
 Mine Surveyor: David Jones.
 Overman: G. Stoller.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 46 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 5ft. by 6ft. Depth of Slope: 79 ft.
 Location of Mine: L.S. 1 and 2, Sec. 4,
 Tp. 38, Rge. 14, W. 4th Mer.
 Coal Mining Lease Number: 5403.

Truck mine.
 Registered Trade Name: Bentonite Coal.

Mitchinson Coal Mine—Mine No. 1248

Mine Office: Donalda, Alberta.
 Mine Manager: T. Mitchinson.
 Mine Surveyor: David Jones.
 Overman: Thomas Mitchinson.
 Thickness of Seam: 4ft. 6in.
 Thickness of Cover: 100 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 5ft. by 6ft. Depth of Slope: 30 ft.
 Location of Mine: L.S. 10 and 11, Sec.
 29, Tp. 41, Rge. 17, W. 4th Mer.
 Coal Mining Lease Number: S.L. 17.
 Truck mine.
 Registered Trade Name: Mitchinson Coal.

James Easton—Mine No. 1417

Authorized Capital: \$1,500.00.
 Mine Office: Castor, Alberta.
 Mine Manager: James Easton.
 Mine Surveyor: David Jones.
 Overman: James Easton.
 Thickness of Seam: 5ft. 6in.
 Thickness of Cover: 40 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: N. $\frac{1}{2}$ of L.S. 6, Sec.
 14, Tp. 34, Rge. 37, West of 4th Mer.
 Coal Mining Lease Number: 5013.
 Truck mine.
 Registered Trade Name: Burn Brite
 Coal.

E. Lien—Mine No. 1435

Authorized Capital: \$1,200.00.
 Mine Office: Edberg, Alberta.
 Mine Manager: E. Lien.
 Mine Surveyor: David Jones.
 Overman: E. Lien.
 Thickness of Seam: 4ft. 8in.
 Thickness of Cover: 75 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: S. $\frac{1}{2}$ L.S. 11, Sec. 2,
 Tp. 44, Rge. 19, W. 4th Mer.
 Coal Mining Lease Number: 5122.
 Truck mine.
 Registered Trade Name: Rosebush Coal.

J. W. Marshall—Mine No. 1441

Mine Office: Donalda, Alberta.
 Mine Manager: John W. Marshall.
 Mine Surveyor: David Jones.
 Overman: J. W. Marshall.
 Thickness of Seam: 10ft. 10in.
 Thickness of Cover: 128 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 12, Sec. 16, Tp. 42,
 Rge. 17, W. 4th Mer.
 Coal Mining Lease Number: 5132.
 Truck mine.
 Registered Trade Name: Marshall Coal.

H. C. Muncy—Mine No. 1541

Mine Office: Foreman, Alberta.
 Mine Manager: H. C. Muncy.
 Mine Surveyor: David Jones.
 Overman: H. C. Muncy.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 32 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 15, Sec. 26, Tp. 40,
 Rge. 16, W. 4th Mer.
 Coal Mining Lease Number: 5308.
 Truck mine.
 Registered Trade Name: Eastern Gem
 Coal.

Annonson & Radford—Mine No. 1572

Authorized Capital: \$2,500.00.
 Name of President: Alvin E. Annonson.
 Name of Directors: Alvin E. Annonson,
 J. N. Radford, H. D. Annonson.
 Name of Secretary: John H. Radford.
 Name of Treasurer: Alvin E. Annonson.

Mine Office: Donalda, Alberta.
 Mine Manager: John H. Radford.
 Mine Surveyor: David Jones.
 Overman: John H. Radford.
 Thickness of Seam: 4ft. 6in.
 Thickness of Cover: 100 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 5, Sec. 28, Tp. 41,
 Rge. 17, W. 4th Mer.
 Coal Mining Lease Number: 5325.
 Truck mine.
 Registered Trade Name: Black Eagle
 Coal.

Bish Bros.—Mine No. 1578

Mine Office: Forestburg, Alberta.
 Mine Manager: Mark Edwards.
 Mine Surveyor: David Jones.
 Overman: Mark Edwards.
 Thickness of Seam: 8 feet.
 Thickness of Cover: 42 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of shaft:
 5ft. by 8ft. Depth of Shaft: 50 feet.
 Location of Mine: L.S. 15, Sec. 36, Tp. 40,
 Rge. 16, W. 4th Mer.
 Coal Mining Lease Number: 5365.
 Truck mine.
 Registered Trade Name: Bish Coal.

J. J. Mills & Sons—Mine No. 1587

Authorized Capital: \$5,000.00.
 Mine Office: Heisler, Alberta.
 Mine Manager: J. J. Mills.
 Mine Surveyor: David Jones.
 Overman: J. J. Mills.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 100 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 7ft. by 7ft. Depth of Slope: 137 ft.
 Location of Mine: L.S. 5, Sec. 22, Tp. 42,
 Rge. 17, W. 4th Mer.
 Coal Mining Lease Number: 5425.
 C.N.R. and Truck mine.
 Registered Trade Name: Eagle Coal.

Castor Coal & Construction Co.— Mine No. 1608

Mine Office: Castor, Alberta.
 Mine Manager: W. G. Brown.
 Mine Surveyor: David Jones.
 Overman: R. Walker.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 18 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: S. and N. $\frac{1}{2}$ of L.S. 6
 and 3, Sec. 3, Tp. 38, Rge. 14, West of
 4th Mer.
 Coal Mining Lease Number: C.P.R. 561,
 604.
 C.P.R. and Truck mine.
 Registered Trade Name: Tower Coal.

Alfred Sorken—Mine No. 1614

Mine Office: Killam, Alberta.
 Mine Manager: A. Sorken.
 Mine Surveyor: David Jones.
 Overman: A. Sorken.
 Thickness of Seam: 6 $\frac{1}{2}$ feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 16, Sec. 26, Tp.
 40, Rge. 16, W. 4th Mer.
 Truck mine.
 Registered Trade Name: Radar Coal.

F. N. Wiltse—Mine No. 1634

Mine Office: Halkirk, Alberta.
 Mine Manager: F. N. Wiltse.
 Mine Surveyor: David Jones.
 Overman: Ralph C. Wiltse.
 Location of Mine: W. $\frac{1}{2}$ L.S. 11, Sec. 32,
 Tp. 39, Rge. 15, W. 4th Mer.
 Coal Mining Lease: C.P.R.
 Registered Trade Name: Canyon Mine
 Coal.

Bradley & O'Brien—Mine No. 1642

Authorized Capital: \$5,000.00.
 Mine Office: Halkirk, Alberta.
 Mine Manager: Anthony O'Brien.
 Mine Surveyor: David Jones.
 Overman: A. O'Brien.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 35 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 14, Sec. 25, Tp.
 40, Rge. 16, W. 4th Mer.
 Coal Mining Lease Number: 627 C.P.R.
 Truck mine.
 Registered Trade Name: Active Coal.

Wm. Jones—Mine No. 1650

Mine Office: Forestburg, Alberta.
 Mine Manager: Wm. Jones.
 Mine Surveyor: David Jones.
 Overman: Wm. Jones.
 Location of Mine: L.S. 10, Sec. 32, Tp.
 40, Rge. 15, West of 4th Mer.
 Coal Mining Lease Number: H.B.C. 126.
 Registered Trade Name: Mother's Pride
 Coal.

Sand and Grettum—Mine No. 1665

Mine Office: Edberg, Alberta.
 Thickness of Seam: 4 $\frac{1}{2}$ feet.
 Thickness of Cover: 11 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 3, Sec. 14, Tp. 43,
 Rge. 20, West of 4th Mer.
 Coal Mining Lease Number: 5639.
 Registered Trade Name: Edberg Coal.

CASCADE AREA

The Canmore Mines Ltd.—Mine No. 2

Authorized Capital: \$1,000,000.00.
 Name of President: Edmund Hayes.
 Names of Directors: Edmund Hayes, B.
 F. Crane, W. R. Stewart, A. J. Mac-
 Millan, R. M. Young, Geo. F. Jewett,
 L. S. Headley.
 Name of Secretary: J. E. A. McLeod.
 Name of Treasurer: L. S. Headley.
 Head Office: Canmore, Alberta.
 Mine Office: Canmore, Alberta.
 Exec. Vice-Pres. and General Manager:
 R. M. Young.
 Mine Manager: Wm. Wilson.
 Mine Surveyor: C. S. Dewis.
 Overmen: A. A. Fox and V. Mrokwia Jr.
 Firebosses: W. Bell, J. Brown, A. Baroni,
 M. Carmichael, J. C. James, A. Kowal,
 S. Lauhela, H. Musgrove, H. Niskanen,
 J. Riva, B. Rogers, H. Paavola,
 A. Shellan, J. Wardrop.
 Thickness of Seam: 8 ft. and 10 ft.
 Thickness of Cover: Up to 2,000 feet.
 Inclination of Seams: 10 to 35 degrees.
 Form of Opening: Slope. Size of Slope:
 16ft. by 8ft. Depth of Slope: Stewart
 and Morris, 1,000 ft.; No. 4 Seam,
 2,400 feet.
 Location of Mine: N.E. $\frac{1}{4}$ L.S. 1, Sec. 29,
 Tp. 24, Rge. 10, W. 5th Mer.
 Coal Mining Lease Number: S.L. 130,
 131.
 C.P.R. and Truck mine.
 Registered Trade Name: Canmore Coal.

Frank Wheatley & Sons—Mine No. 1244

Head Office: Banff, Alberta.
 Mine Office: Anthracite, Alberta.
 Mine Manager: F. M. Wheatley.
 Mine Surveyor: L. C. Stevens.
 Fireboss: J. W. Wheatley.
 Thickness of Seam: 8 feet.
 Thickness of Cover: 200 feet.
 Inclination of Seam: 35° to 40°.
 Form of Opening: Slope. Size of Slope:
 300 feet.
 Location of Mine: L.S. 12, Sec. 4, Tp. 26,
 Rge. 11, W. 5th Mer.
 Coal Mining Lease Number: C.L.S. 9.
 Truck mine.

Registered Trade Name: Wheatley Bros. Coal.

Kananaskis Exploration & Development Co. Ltd.—Mine No. 1667

Mine Office: Seebe, Alberta.
Location of Mine: N.E. $\frac{1}{4}$ L.S. 7 and 8, Sec. 3, Tp. 23, Rge. 9, West 5th Mer.
Registered Trade Name: Cascade Coal.
New mine just opened; no particulars.

CHAMPION AREA

George Rhodes—Mine No. 136

Mine Office: Champion, Alberta.
Mine Surveyor: J. F. Hamilton.
Overman: George Rhodes.
Location of Mine: L.S. 7, Sec. 8, Tp. 15, Rge. 22, West 4th Mer.
Registered Trade Name: Therriault Coal.

P. Fontana & Sons—Mine No. 1509

Mine Office: Champion, Alberta.
Mine Manager: Peter Fontana.
Mine Surveyor: J. F. Hamilton.
Thickness of Seam: 3ft. 9in.
Thickness of Cover: Average 94 feet.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope: 5ft. by 6 ft. Depth of Slope: 250 feet.
Location of Mine: L.S. 15, Sec. 33, Tp. 15, Rge. 23, W. 4th Mer.
Coal Mining Lease Number: 5290.
Truck mine.
Registered Trade Name: Champion Coal.

Mike Popovich—Mine No. 1565

Mine Office: Champion, Alberta.
Mine Manager: Mike Popovich.
Mine Surveyor: J. F. Hamilton.
Thickness of Seam: 3ft. 4in.
Thickness of Cover: 105 feet.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope: 4ft. by 5ft. Depth of Slope: 225 feet.
Location of Mine: L.S. 9, Sec. 8, Tp. 16, Rge. 23, W. 4th Mer.
Truck mine.
Registered Trade Name: Ellis Coal.

COALSPUR AREA

Sterling Collieries, Ltd.—Mine No. 769

Authorized Capital: \$500,000.
Name of President: C. B. Munson.
Names of Directors: S. W. Field, S. Stevenson, H. R. Milner, F. J. Mitchell.
Name of Secretary: F. J. Mitchell.
Name of Treasurer: F. J. Mitchell.
Head Office: 912 McLeod Building, Edmonton, Alberta.
Mine Office: Sterco, Alberta.
General Manager: W. F. Stevenson.
Mine Manager: J. A. Holroyd.
Mine Surveyor: R. H. Watson.
Thickness of Seam: 100 to 120 feet.
Thickness of Cover: 40 to 80 feet.
Form of Opening: Open pit.
Location of Mine: L.S. 12, Sec. 35, Tp. 47, Rge. 20, W. 5th Mer.
Coal Mining Lease Number: 1510.
Mine located on C.N.R.
Registered Trade Name: Sterling Coal.

The Foothills Collieries, Ltd.—Mine No. 771

Authorized Capital: \$300,000.
Name of President: A. W. Windatt.
Name of Directors: E. H. Bennest, H. Wallace, C. D. Shepard, F. Andrews, Hon. S. R. Vereker.
Name of Sec.-Treas.: F. Andrews.
Mine Office: Foothills, Alberta.
General Manager: A. E. Windatt.
Mine Manager: Wm. Morris.
Mine Surveyor: L. C. Stevens.
Overman: E. Griffiths.

Firebosses: J. E. Mitchell, R. Tompkins, E. Richards, W. Gregory.
Thickness of Seam: 8ft. 9in.
Thickness of Cover: 400 feet.
Inclination of Seam: 20 to 22 degrees.
Form of Opening: Slope. Size of Slope: 10ft. Depth of Slope: 1,900 feet.
Location of Mine: L.S. 10, Sec. 24, Tp. 47, Rge. 20, W. 5th Mer.
Coal Mining Lease Number: 5344.
Mine located on C.N.R.
Registered Trade Name: Foothills Coal.

McLeod River Hard Coal Co. (1941), Ltd.—Mine No. 846

Authorized Capital: \$50,000.
Name of President: J. A. Boyd.
Names of Directors: J. A. Boyd, R. W. Steele, Arthur Cross, George Kidd, C. Gordon Cockshutt, N. R. Whittall.
Name of Secretary: H. S. Causby.
Name of Treasurer: S. V. Isaacson.
Head Office: Toronto, Ont.
Mine Office: Mercoal, Alberta.
General Manager: H. R. Plommer.
Mine Manager and Surveyor: L. G. Chavignaud.
Overman: J. Rochester.
Firebosses: S. Baker, W. James, J. Keef, C. McMurtry, W. Gosney, J. Parry, J. Lidgett, J. Herpshaw, M. Honeyman, A. McIntyre, D. MacKay.
Thickness of Seam: 11 feet.
Inclination of Seam: 20° to 40°.
Form of Opening: Slope. Size of Slope: 8½ft. by 14ft. Depth of Slope: 2,000 feet.
Location of Mine: L. S. 5, Sec. 25, Tp. 48, Rge. 22, W. 5th Mer.
Coal Mining Lease Number: 1605.
Mine located on C.N.R.
Registered Trade Name: McLeod River Hard Coal.

Coal Valley Mining Co., Ltd.—Mine No. 1002

Authorized Capital: \$1,000,000.
Name of President: C. B. Munson.
Name of Directors: S. W. Field, C. B. Munson, H. R. Milner, W. F. Stevenson, F. J. Mitchell.
Name of Secretary: W. C. Willetts.
Name of Treasurer: W. C. Willetts.
Head Office: 705 McLeod Building, Edmonton, Alberta.
Mine Office: Coal Valley, Alberta.
General Manager: W. F. Stevenson.
Mine Manager: A. A. Fraser.
Mine Surveyor: A. A. Fraser.
Fireboss: M. Loveniuk.
Thickness of Seam: 110 feet.
Thickness of Cover: 15ft. to 85ft.
Inclination of Seam: 40 degrees.
Form of Opening: Open pit mine.
Location of Mine: L.S. 16, Sec. 26, Tp. 47, Rge. 20, W. 5th Mer.
Coal Mining Lease Numbers: 5415, 5414, 5391.
Mine located on C.N.R.
Registered Trade Name: Cova Coal.

Bryan Hard Coal, Ltd.—Mine No. 1157

Authorized Capital: \$200,000.
Name of President: A. M. Matheson.
Names of Directors: J. E. Bagley, B. A. Ogilvie.
Name of Sec.-Treas.: G. W. Finlay.
Head Office: 309 Agency Bldg., Edmonton, Alberta.
Mine Office: Robb, Alberta.
Mine Manager: T. O. Davies.
Mine Surveyor: L. C. Stevens.
Overman: J. McClelland.
Firebosses: R. Ranovich, W. Burrell.
Thickness of Seam: 10 feet.
Thickness of Cover: 350 feet.
Inclination of Seam: 36 degrees.
Form of Opening: Slope. Size of Slope: 7ft. by 12ft. Depth of Slope: 650 feet.

Location of Mine: L.S. 11, Sec. 15, Tp. 49, Rge. 21, West 5th Mer.
Coal Mining Lease Number: 5351.
Mine located on C.N.R.
Registered Trade Name: Bryan Mountain Hard Coal.

CROWSNEST AREA

West Canadian Collieries, Ltd.— Mine No. 87

Authorized Capital: \$3,600,000.
Name of President: Edouard Rasson.
Names of Directors: J. A. Brusset, Hon. C. Dunning, A. E. Whitmore, Mr. Decoster, De Gaspé Beaubien.
Name of Secretary: G. H. Labyt.
Head Office: 833 Salisbury House, London, E.C. 2, England.
Mine Office: Blairmore, Alberta.
General Manager: J. A. Brusset.
Mine Manager: M. H. Congdon.
Mine Surveyor: L. M. Dworkin.
Overman: D. Rees.
Thickness of Seam: 11 feet.
Thickness of Cover: 0 to 1,000 feet.
Overmen: H. Kaye, D. Hutton, C. Young, A. Goodwin, G. W. Goodwin.
Firebosses: J. McLeod, J. Walsh, A. Grant, A. Emmerson, S. Cummins, J. Radford, D. Morris, W. Prescott, G. Cousins, C. Olitch, C. Woolney, J. Michayluk, W. Alexander.
Inclination of Seam: 0 to 900 feet.
Form of Opening: Adit.
Location of Mine: L.S. 10, Sec. 20, Tp. 7, Rge. 3, W. 5th Mer.
Coal Mining Lease Number: M.S. 231.
C.P.R. and Truck mine.
Registered Trade Name: Bellevue Coal.

International Coal & Coke Co., Ltd.— Mine No. 88

Authorized Capital: \$3,000,000.
Name of President: H. A. Howard.
Names of Directors: R. G. Anderson, H. Davidson, J. Black, H. Howard, G. A. Wallinger, A. L. Johannson, J. Buchanan, R. R. McNaughton.
Chairman of the Board: Hugh Davidson.
Vice-President: A. L. Johannson.
Name of Secretary: P. A. Dickieson.
Name of Treasurer: J. Emmerson.
Head Office: Coleman, Alberta.
Mine Office: Coleman, Alberta.
General Manager: J. J. McIntyre.
W. B. Fraser.
Mine Manager: W. B. Fraser.
Mine Surveyor: H. E. Hewitt.
Overmen: A. Brown, E. Hill, A. Tiberghein.
Firebosses: J. V. Fraser, N. Fleming, A. Jones, J. Moore, A. J. Phillips, J. Kubin, J. Marconi, T. Donaldson, G. Marconi, B. Fontana, L. C. Richards, J. Hillary, P. Topak, L. Hotte, V. Brown, J. Lowe.
Thickness of Seam: 5 to 12 feet.
Thickness of Cover: 2,000 feet.
Inclination of Seam: 30 degrees.
Form of Opening: Slope. Size of Slope: 12ft. by 10ft. Depth of Slope, 3,400 feet.
Location of Mine: L.S. 11, Sec. 8, Tp. 8, Rge. 4, W. 5th Mer.
Coal Mining Lease Number: H.B.C.
C.P.R. and Truck mine.
Registered Trade Name: International Coal.

Hillcrest-Mohawk Collieries, Ltd.— Mine No. 133

Authorized Capital: \$1,125,000.00.
Name of President: Frank P. Turville.
Names of Directors: F. P. Turville, F. J. Harquail, E. Richardson, J. C. Kemp, M. Graves, J. Gordon.
Name of Secretary: Frank J. Harquail.
Name of Treasurer: Erick Richardson.
Head Office: Calgary, Alberta.
Mine Office: Bellevue, Alberta.

General Superintendent: D. B. Young.
Mine Manager: Henry Miller.
Mine Surveyor: A. E. Williams.
Overmen: J. Ironmonger, J. Shearer.
Firebosses: J. McDade, R. Clarke, A. White, A. Bianchini, M. Bianchini, R. Kerr, J. Maddison, S. Lesson, V. Molnar, J. Gresl, A. Craig, L. Luini, J. Griffiths, B. Tamborini.
Thickness of Seam: 9 to 14 feet.
Thickness of Cover: 800 feet.
Inclination of Seam: 5° to vertical.
Form of Opening: Level Drift.
Location of Mine: S.E. ¼ Sec. 21, Tp. 7, Rge. 3, West 5th Mer.
Coal Mining Lease Number: C.L.S.
C.P.R. and Truck mine.
Registered Trade Name: Hillcrest-Mohawk Coal.

Matt Wood—Mine No. 199

Authorized Capital: \$3,000.00.
Mine Office: Beaver Mines, Alberta.
Mine Manager: Matt Wood.
Mine Surveyor: Fred Utley.
Overman: M. Wood.
Thickness of Seam: 4ft. to 8ft. 6in.
Thickness of Cover: 70 feet.
Inclination of Seam: 25° to 30°.
Form of Opening: Drift.
Location of Mine: L.S. 10, Sec. 3, Tp. 6, Rge. 3, W. 5th Mer.
Coal Mining Lease Number: M.S. 1065.
Truck mine.
Registered Trade Name: Beaver Coal.

McGillivray Creek Coal & Coke Co., Ltd.—Mine No. 204

Authorized Capital: \$3,000,000.
Name of President: H. A. Howard.
Names of Directors: H. A. Howard, A. L. Johannson, R. G. Anderson, G. A. Wallinger, R. R. McNaughton, G. M. Warren, H. A. Thoeny.
Name of Sec.-Treas.: S. C. Short.
Head Office: Coleman, Alberta.
Mine Office: Coleman, Alberta.
General Manager: J. J. McIntyre.
Mine Manager: L. M. McDonald.
Mine Surveyor: A. E. Graham.
Overmen: H. A. Hulbert, P. Smith.
Firebosses: E. Allen, A. Beveridge, R. Campbell, A. Galbraith, W. Hopkins, A. Hughes, M. Kubica Jr., W. Lonsbury, R. Morris, J. Ondrik, R. Parry, H. Urwin.
Thickness of Seam: No. 2 Seam, 9 ft.; No. 4 Seam, 4½ ft.
Thickness of Cover: 0 to 2,400 feet.
Inclination of Seam: 35 degrees.
Form of Opening: Slope. Size of Slope: 8ft. by 12ft. Depth of Slope: 4,500 ft.
Location of Mine: S.W. ¼ L.S. 2, Sec. 17, Tp. 8, Rge. 4, W. 5th Mer.
Coal Mining Lease Number: C.L.S. 449.
C.P.R. and Truck mine.
Registered Trade Name: McGillivray Creek Coal.

West Canadian Collieries, Ltd.— Mine No. 396

Authorized Capital: \$3,000,000.00.
Name of President: E. Rasson.
Name of Directors: M. Bernard, Mr. Dunning, Mr. Whitmore, Mr. Decoster, Mr. Beaubien.
Name of Secretary: G. H. Labyt.
Head Office: 833 Salisbury House, London Wall, London, Eng.
Mine Office: Blairmore, Alberta.
General Manager: J. A. Brusset.
Mine Manager: H. H. Gardner.
Asst. Mine Manager: T. E. Morgan.
Mine Surveyor: D. T. Brown.
Overmen: M. Hamilton, D. McLafferty, J. Davis, R. Tonge, L. Hucik, M. Aschaker.
Firebosses: J. Sharretta, I. Walker, W. Patterson, S. Patterson, V. Blas, J. Patterson, G. Gibson, C. Cartwright, T. Hadwell, C. Miller, S. Price, R.

Blake, W. North, A. Tiberger, A. Rea, R. Draper, D. Kemp, J. McAndrew, A. Evans, J. McIsaac.
 Thickness of Seam: 5 to 16 feet.
 Thickness of Cover: 0 to 1,000 feet.
 Inclination of Seam: 40 degrees.
 Form of Opening: Adit.
 Location of Mine: L.S. 10, Sec. 2, Tp. 8, Rge. 4, W. 5th Mer.
 Coal Mining Lease Number: C.L.S. 125, 506.
 C.P.R. and Truck mine.
 Registered Trade Name: Greenhill Coal.

**West Canadian Collieries, Ltd.—
 Mine No. 1584**

Authorized Capital: \$3,000,000.00.
 Name of President: E. Rasson.
 Names of Directors: Mr. Bernard, Mr. Dunning, Mr. Whitmore, Mr. Decoster, Mr. Beaubien.
 Name of Secretary: G. H. Labyt.
 Head Office: 833 Salisbury House, London Wall, London, Eng.
 Mine Office: Blairmore, Alberta.
 General Manager: J. A. Brusset.
 Mine Manager: W. Goodwin.
 Mine Surveyor: F. W. Uteley.
 Overmen: C. McDonald, R. Blake.
 Firebosses: K. McDonald, W. McDonald, J. Morris, D. Rees.
 Thickness of Seam: 12 feet.
 Thickness of Cover: Variable.
 Inclination of Seam: 12 to 80 degrees.
 Form of Opening: Adit 16ft. by 9ft.
 Location of Mine: L.S. 15, Sec. 31, Tp. 6, Rge. 3, W. 5th Mer.
 C.P.R. and Truck mine.
 Registered Trade Name: Adanac Coal.

T. O. Neumann—Mine No. 1623

Mine Office: Pincher Creek, Alberta.
 Mine Manager: T. O. Neumann.
 Overman: Frank Batchelor.
 Form of Opening: Adit. Size of Slope: 6ft. by 6ft. Depth of Shaft: 70 feet.
 Location of Mine: L.S. 6, Sec. 11, Tp. 5, Rge. 1, W. 5th Mer.
 Coal Mining Lease Number: S.L. 537.
 Truck mine.
 Registered Trade Name: Meridian Mine Coal.

DRUMHELLER AREA

Rosedale Collieries, Ltd.—Mine No. 346

Authorized Capital: \$20,000.00.
 Name of President: John R. Brodie.
 Names of Directors: J. R. Brodie, B. C. Parker, H. F. Liggins, F. N. Nord, H. F. Parker.
 Name of Secretary-Treasurer: J. Frank Harvie.
 Head Office: 909 Lancaster Building, Calgary, Alberta.
 Mine Office: Rosedale, Alberta.
 General Manager: Russell Richards.
 Mine Manager: T. Rappell.
 Mine Surveyor: R. Richards.
 Overmen: R. Bradshaw and Wm. Jones.
 Firebosses: H. Sladek, J. Zambo, A. Sladek, S. Berlando, W. Roberts, J. Strecker.
 Thickness of Seam: 4 to 5 feet.
 Thickness of Cover: 450 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft: 11ft. by 15ft. Depth of Shaft: 45 ft.
 Location of Mine: L.S. 14, Sec. 28, Tp. 28, Rge. 19, W. 4th Mer.
 Coal Mining Lease Number: 5038, 5039.
 Mine located on C.N.R.
 Registered Trade Name: Rosedale Coal.

**Midland Coal Mining Co. Ltd.—
 Mine No. 367**

Authorized Capital: \$50,000.
 Name of President: Mr. L. M. McMullen.
 Names of Directors: S. G. McMullen, W. R. Sanercock.

Name of Secretary: S. G. McMullen.
 Mine Office: Drumheller, Alberta.
 General Manager: S. G. McMullen.
 Mine Manager: A. A. Millar.
 Mine Surveyor: A. G. Macaulay.
 Overman: George Nicol.
 Firebosses: M. Bobrosky, H. Looten, J. Petit, C. Boughton, J. Evans, T. Gibson, W. Holowatiuk, J. Jubb, A. McKinnon, W. Taylor.
 Thickness of Seam: 5 feet.
 Thickness of Cover: Up to 520 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft: 9ft. by 19ft. Depth of Shaft: 135 feet.
 Location of Mine: L.S. 14, Sec. 9, Tp. 29, Rge. 20, West of 4th Mer.
 Coal Mining Lease Number: 5068.
 Mine located on C.N.R.
 Registered Trade Name: Midland Coal.

**Red Deer Valley Coal Co., Ltd.—
 Mine No. 402**

Authorized Capital: \$347,100.
 Name of President: Wm. S. Howland.
 Names of Directors: Wm. S. Howland, Miss E. Howland, H. J. Scott.
 Name of Sec.-Treas.: H. J. Scott.
 Head Office: Drumheller, Alta.
 Mine Office: Nacmiche, Alta.
 General Manager: H. J. Scott.
 Mine Manager: I. Potter.
 Mine Surveyor: Gordon L. Kidd.
 Overmen: A. Courterelle, R. Clock, C. Atkinson, P. Goods, I. Folden, H. Roberts, G. Anderson.
 Thickness of Seam: 5ft. to 6ft.
 Thickness of Cover: 180 to 550 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft and Slope: Size of Shaft: 15ft. by 18ft. Depth of Shaft: 185 ft. Size of Slope: 11ft. by 7ft. Depth of Slope: 170ft. to 650ft.
 Location of Mine: N.E. Rd. Allow., Sec. 7, Tp. 29, Rge. 20, West 4th Mer.
 Coal Mining Lease Number: 1029, 5515.
 Mine located on C.P.R.
 Registered Trade Name: Glocoal.

Commander Coal Co.—Mine No. 422

Name of President: Brig. L. Patrick.
 Head Office: Calgary, Alberta.
 Mine Office: Drumheller, Alberta.
 Mine Surveyor: A. C. Hnatyshyn.
 Mine Manager: A. C. Hnatyshyn.
 Mine Overman: D. Mayoh.
 Firebosses: W. Morse, R. Halbert, M. Trevethin, R. Ralsbeck, E. Jones, A. Thomson.
 Thickness of Seam: 4ft. 9in.
 Thickness of Cover: 150 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft: 12ft. by 20ft. Depth of Shaft: 166 ft.
 Location of Mine: L.S. 5, Sec. 9, Tp. 29, Rge. 20, W. 4th Mer.
 Coal Mining Lease Number: 2379.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Commander Coal.

**Rosedale Collieries, Ltd. (Star Mine)
 —Mine No. 436**

Same particulars as for No. 346.
 Mine Office: Aerial, Alberta.
 Mine Manager: W. Hibbert.
 Mine Surveyor: R. Richards.
 Overman: S. Appleby.
 Firebosses: I. C. Radocy, T. Serko, P. Kenikan, E. M. Davies.
 Thickness of Seam: 5½ feet.
 Thickness of Cover: 150 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Level.
 Location of Mine: S.E. ¼ L.S. 7, Sec. 28, Tp. 28, Rge. 19, W. 4th Mer.
 Coal Mining Lease: C.P.R.
 Mine located on C.N.R.
 Registered Trade Name: Star Coal.

Newcastle Collieries, Ltd.—Mine No. 620

Authorized Capital: \$300,000.
 Name of President: Wilson Gouge.
 Names of Directors: Jesse Gouge, Wilson Gouge, Mrs. R. E. Coyle, M. Cook.
 Name of Secretary-Treasurer: Jesse Gouge.
 Mine Office: Drumheller, Alberta.
 General Manager: Jesse Gouge.
 Mine Manager: Thomas Campbell.
 Mine Surveyor: J. Robertson.
 Overman: J. McCutcheon.
 Firebosses: A. Armstrong, E. Harris, W. B. Henry, R. Forshaw, J. Whitehead, C. Dunn.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 650 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft: 8ft. by 12ft. Depth of Shaft: 100 feet.
 Location of Mine: S.W. $\frac{1}{4}$ of Sec. 3, Tp. 29, Rge. 20, West 4th Mer.
 Coal Mining Lease Number: 5054, 5046.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Newcastle Coal.

Mape Leaf Minerals, Ltd.—Mine No. 728

Authorized Capital: \$10,000.00.
 Name of President: D. H. Smith.
 Names of Directors: N. F. Priestley, C. A. Fawcett, M. M. McDonald, J. Frey, D. H. Smith.
 Name of Sec.-Treas.: N. F. Priestley.
 Mine Office: Drumheller, Alberta.
 General Manager: D. H. Smith.
 Mine Manager: A. G. Macaulay.
 Mine Surveyor: A. G. Macaulay.
 Overman: W. Menzies.
 Firebosses: G. Unsworth, F. Kane.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 200 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 13, Sec. 32, Tp. 27, Rge. 18, W. 4th Mer.
 Coal Mining Lease Number: 5303.
 C.N.R. and C.P.R. mine.
 Registered Trade Name: National Coal.

O. W. Whittaker—Mine No. 1117

Mine Office: Beynon, Alberta.
 Mine Manager: O. W. Whittaker.
 Mine Surveyor: Gordon L. Kidd.
 Fireboss: O. W. Whittaker.
 Thickness of Seam: 3ft. 6in.
 Thickness of Cover: 15 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 3, Sec. 6, Tp. 28, Rge. 20, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 586.
 Truck mine.
 Registered Trade Name: Hi-Heat Coal.

Brilliant Coal Company—Mine No. 1258

Authorized Capital: \$300,000.00.
 Mine Office: Drumheller, Alberta.
 General Manager: J. A. Sandino.
 Mine Manager: R. Dunn.
 Mine Surveyor: L. C. Stevens.
 Overman: J. Saunt.
 Firebosses: A. Clozza, J. Wakaruk, J. Chuippi, R. Stocco.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 400 to 450 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft and slope. Size of shaft: 8ft. by 12ft. Depth of Shaft: 120 feet. Size of Slope: 6ft. by 8ft. Depth of Slope: 450 feet.
 Location of Mine: L.S. 14, Sec. 10, Tp. 29, Rge. 20, W. 4th Mer.
 Coal Mining Lease Number: 5282.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Brilliant Coal.

Saskatchewan Federated Co-operatives, Ltd.—Mine No. 1299

Authorized Capital: \$5,000,000.00.
 Name of President: G. Urwin.

Name of Directors: G. Baker, L. Bright, J. Bryson, J. Gray, L. Lloyd, V. Thomas, W. Mills, A. Newcombe, M. Rankin, J. Sinclair, M. Watson.
 Name of Secretary: H. L. Fowler.
 Name of Treasurer: E. T. Mowbrey.
 Head Office: Saskatoon, Saskatchewan.
 Mine Office: East Coulee, Alberta.
 General Manager: John T. Burton.
 Mine Manager: Philip Melson.
 Mine Surveyor: A. G. Macaulay.
 Overman: John Young.
 Firebosses: W. McFegan, M. Morel, M. Otrasek.
 Thickness of Seam: 6ft. to 7ft.
 Thickness of Cover: 200ft. to 300ft.
 Inclination of Seam: Horizontal.
 Form of Opening: Tunnel.
 Location of Mine: L.S. 2, Sec. 32, Tp. 27, Rge. 18, W. 4th Mer.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Empire Coal.

Hy-Grade Coal Mining Co., Ltd.—Mine No. 1421

Same particulars as for Mine No. 1299.
 Mine Manager: John Robertson.
 Mine Office: Drumheller, Alberta.
 Mine Surveyor: John Robertson.
 Overman: James Burton.
 Firebosses: J. Owen, J. Farmer, F. Ellison, N. Blackett, J. Taylor, F. Keough, G. Wheatcroft, T. McNeill.
 Thickness of Seam: $3\frac{1}{2}$ to 9 feet.
 Thickness of Cover: 400 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft: 8ft. by 15ft. Depth of Shaft: 88 feet.
 Location of Mine: L.S. 13, Sec. 11, Tp. 29, Rge. 20, W. 4th Mer.
 Coal Mining Lease Number: 2458.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Hy-Grade Coal.

Regal Coal Co., Ltd. (Atlas Coal Mine)—Mine No. 1484

Head Office: 228 Examiner Bldg., Calgary, Alberta.
 Mine Office: East Coulee, Alberta.
 General Manager: L. Patrick.
 Mine Manager: A. Wilson.
 Mine Surveyor: Andrew Wilson.
 Overman: S. Mather.
 Firebosses: A. Andrew, J. Bachynski, A. James, J. MacKenzie, D. Mackie, J. Raisbeck, P. Show.
 Thickness of Seam: 5ft. 2in.
 Thickness of Cover: 200 to 400 ft.
 Inclination of Seam: Undulating.
 Form of Opening: Level.
 Location of Mine: N.W. $\frac{1}{4}$ of L.S. 13, Sec. 21, Tp. 27, Rge. 18, West 4th Mer.
 Coal Mining Lease Number: C.P.R.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: New Wildfire.

Murray Collieries, Ltd.—Mine No. 1491

Authorized Capital: \$100,000.
 Name of President: H. K. Reed.
 Names of Directors: Henry K. Reed, Donald C. McVeigh.
 Mine Office: East Coulee, Alberta.
 Mine Manager: Hugh G. McKinnon.
 Mine Surveyor: Gordon L. Kidd.
 Overman: T. McDonald.
 Firebosses: J. Cotterill, R. Stevenson, W. L. Sheppard, R. Anderson, W. H. Mullingar, R. Steven, A. B. Raisbeck, J. Crawford.
 Thickness of Seam: 5ft. 3in.
 Thickness of Cover: 375 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Tunnel.
 Location of Mine: S.E. $\frac{1}{4}$, Sec. 29, Tp. 27, Rge. 18, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 539.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: New Murray Coal.

Western Gem & Jewel Collieries, Ltd.
—Mine No. 1493

Authorized Capital: \$750,000.
Name of President: Alex. Robertson.
Names of Directors: Alex. Robertson,
Steward Robertson, H. H. Albright,
W. P. Gamble, D. M. Henderson.
Name of Sec.-Treas.: H. H. Albright.
Head Office: 607 Lancaster Bldg., Cal-
gary, Alberta.
Mine Office: Cambria, Alberta.
General Manager: Alex. Robertson.
Mine Manager: N. Howells.
Mine Surveyor: John Robertson.
Overman: W. Kennedy.
Firebosses: W. Kay, W. Young, J. Tins-
ley, R. Niblet, J. Kusnir, T. Gordon.
Thickness of Seam: 5 feet.
Thickness of Cover: 400 feet.
Inclination of Seam: Horizontal.
Form of Opening: Adit.
Location of Mine: N.W. $\frac{1}{4}$ of L.S. 16,
Sec. 15, Tp. 28, Rge. 19, West 4th Mer.
Coal Mining Lease Number: 5541.
C.N.R. and C.P.R. mine.
Registered Trade Name: Cambrian Coal.

Aetna Coal Co.—Mine No. 1511

Authorized Capital: \$50,000.00.
Name of President: J. J. O'Dwyer.
Name of Sec.-Treas.: M. A. O'Dwyer.
Head Office: Wayne, Alberta.
Mine Office: Rosedale, Alberta.
General Manager: M. A. O'Dwyer.
Mine Manager: W. Sarsfield.
Mine Surveyor: R. Kidd.
Overman: W. Sarsfield.
Fireboss: M. Ramsay.
Thickness of Seam: 5 feet.
Thickness of Cover: 150 feet.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope:
10ft. by 5ft. Depth of Slope: 100 ft.
Location of Mine: L.S. 1, Sec. 22, Tp. 28,
Rge. 19, W. 4th Mer.
Coal Mining Lease Number: 5039.
C.N.R. and C.P.R. mine.
Registered Trade Name: Aetna Coal.

The Minute Coal Co.—Mine No. 1520

Mine Office: Drumheller, Alberta.
Mine Manager: J. Sinclair.
Mine Surveyor: A. G. Macaulay.
Overman: J. Sinclair.
Thickness of Seam: $5\frac{1}{2}$ feet.
Thickness of Cover: 200 feet.
Inclination of Seam: Horizontal.
Form of Opening: Tunnel.
Location of Mine: L.S. 7, Sec. 14, Tp. 29,
Rge. 20, W. 4th Mer.
Coal Mining Lease Number: 2793A.
C.N.R. and Truck mine.
Registered Trade Name: Good Quality
Coal.

Wayne Co-op. Assoc. Ltd.—Mine No. 1544

Authorized Capital: \$20,000.
Name of President: Quinto Pozzo.
Name of Directors: Quinto Pozzo, Gino
Pozzo, John Blair.
Name of Sec.-Treas.: John Blair.
Mine Office: Wayne, Alberta.
Mine Manager: John Blair.
Surveyor: Gordon L. Kidd.
Overman: John Blair.
Thickness of Seam: 6 feet.
Thickness of Cover: 250 feet.
Inclination of Seam: 20 degrees.
Form of Opening: Slope and Shaft. Size
of Slope: 7ft. by 10ft. Depth of Slope:
200 feet. Size of Shaft: 6ft. by 5ft.
Depth of Shaft: 75 feet.
Location of Mine: L. S. 16, Sec. 7, Tp.
28, Rge. 19, W. 4th Mer.
Coal Mining Lease Number: 5521, 5512.
C.N.R., C.P.R. and Truck mine.
Registered Trade Name: Castle Coal.

Sovereign Coal Co., Ltd.—Mine No. 1570

Authorized Capital: \$15,000.00.
Name of President: J. J. O'Dwyer.
Name of Sec.-Treas.: M. A. O'Dwyer.
Head Office: Wayne, Alberta.
Mine Office: Wayne, Alberta.
General Manager: M. A. O'Dwyer.
Mine Manager: N. Surrendi.
Mine Surveyor: A. G. Macaulay.
Overman: N. Surrendi.
Firebosses: M. White, J. Radpath.
Thickness of Seam: 7 to 8 feet.
Thickness of Cover: 38 feet.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope:
10ft. by 7ft. Depth of Slope: 140 ft.
Location of Mine: N.E. $\frac{1}{4}$ L.S. 8, Sec. 7,
Tp. 28, Rge. 19 W. 4th Mer.
C.P.R., C.N.R. and Truck mine.
Registered Trade Name: Sovereign Coal.

The Monarch Coal Mining Co., Ltd.
—Mine No. 1573

Authorized Capital: \$102,500.00.
Name of President: E. A. Lovett.
Name of Directors: E. A. Lovett, H. I.
Narraway, O. I. Gilbert, J. C. Boyce,
Donald McNeil.
Name of Sec.-Treas.: H. R. Narraway.
Head Office: Calgary, Alberta.
Mine Office: Drumheller, Alberta.
Mine Surveyor: A. Wilson.
Overman: J. Harries.
Firebosses: R. Cowan, F. Simpson, C.
Currie, W. Marsh, A. Black, W.
Runge, B. Gerle.
Thickness of Seam: $4\frac{1}{2}$ -5 feet.
Thickness of Cover: Up to 400 feet.
Inclination of Seam: Undulating.
Form of Opening: Drift.
Location of Mine: L.S. 1, Sec. 20, Tp. 27,
Rge. 18, West 4th Mer.
Coal Mining Lease: C.P.R.
Mine located on C.P.R.
Registered Trade Name: Western Mon-
arch Coal.

John Hamilton—Mine No. 1583

Mine Office: Delia, Alberta.
Mine Surveyor: David Jones.
Overman: John Hamilton.
Thickness of Seam: 3ft. 8in.
Thickness of Cover: 300 feet.
Inclination of Seam: Horizontal.
Location of Mine: N. $\frac{1}{2}$ of L.S. 8 and 9,
Sec. 23, Tp. 28, Rge. 18, West 4th Mer.
Coal Mining Lease Number: 5434.
Truck mine.
Registered Trade Name: Reliance Coal.

Arcadia Coal Mines, Ltd.—Mine No. 1589

Authorized Capital: \$50,000.00.
Name of President: B. K. Bullock.
Names of Directors: B. K. Bullock, W.
E. Bullock, J. V. Milvain.
Name of Secretary: J. V. H. Milvain.
Name of Treasurer: W. E. Bullock.
Head Office: 405 McLean Block, Calgary,
Alberta.
Mine Office: Willow Creek, Alberta.
General Manager: B. K. Bullock.
Mine Manager: Allan Hamilton.
Mine Surveyor: Allan Hamilton.
Overman: Allan Hamilton.
Firebosses: Wm. Allan, Paul Timm.
Thickness of Seam: 3ft. to 4ft.
Thickness of Cover: 175 to 200 feet.
Inclination of Seam: Level and slight
undulations.
Form of Opening: Drift.
Location of Mine: L.S. 16, Sec. 7, Tp. 28,
Rge. 18, W. 4th Mer.
Coal Mining Lease Number: 5351.
C.N.R. and C.P.R. mine.
Registered Trade Name: Purity Hard
Coal.

H. S. Chambers—Mine No. 1599

Mine Office: Delia, Alberta.
 Mine Manager: H. S. Chamber.
 Mine Surveyor: A. G. Macaulay.
 Thickness of Seam: 3ft. 2in.
 Thickness of Cover: 20 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: Sec. 22, Tp. 28, Rge. 18, W. 4th Mer.
 Coal Mining Lease Number: 5458.
 Truck mine.
 Registered Trade Name: Burn Brite Coal.

Wm. Oschazchan—Mine No. 1655

Mine Office: Drumheller, Alberta.
 Mine Manager: A. McCullough.
 Mine Surveyor: Gordon Kidd.
 Overman: A. McCullough.
 Location of Mine: W. and E. $\frac{1}{2}$ of Sec. 22, Tp. 29, Rge. 20, West 4th Mer.
 Registered Trade Name: Munson Hill Coal.

Hackler Brothers—Mine No. 1660

Authorized Capital: \$6,000.00.
 Name of President: Frank L. Hackler.
 Name of Directors: F. L., M. B., J. W., D.W., and J. S. Hackler.
 Name of Secretary: M. B. Hackler.
 Name of Treasurer: F. L. Hackler.
 Mine Office: Wayne, Alberta.
 Mine Surveyor: Mr. Gillis.
 Thickness of Seam: 3ft. 2in.
 Thickness of Cover: 500 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope: 7ft. by 7ft. Depth of Slope: 3 ft.
 Location of Mine: L.S. 2 and 3, Sec. 18, Tp. 28, Rge. 19, West 4th Mer.
 Coal Mining Lease Number: 644.
 Registered Trade Name: Ball Coal.

Livingstone Coal Co.—Mine No. 1666

Mine Office: Nacmine, Alberta.
 General Manager: L. A. Bennett.
 Mine Manager: A. Livingstone.
 Mine Surveyor: A. C. Macaulay.
 Overman: A. Livingstone.
 Thickness of Seam: 3 feet.
 Thickness of Cover: 20 feet.
 Inclination of Seam: 4 degrees.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 16, Sec. 16, Tp. 28, Rge. 19, West 4th Mer.
 Coal Mining Lease Number: 630.
 Registered Trade Name: Livingstone Coal.

EDMONTON AREA**E. Woytowich & M. Senetchko—Mine No. 29**

Head Office: 11240 93rd Street, Edmonton, Alberta.
 Mine Office: Rabbit Hill, Alberta.
 Mine Manager: E. Woytowich.
 Mine Surveyor: L. C. Stevens.
 Overman: Emil Woytowich.
 Thickness of Seam: 4½ feet.
 Thickness of Cover: 109 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope: 7ft. by 6ft. Depth of Slope: 140 ft.
 Location of Mine: L.S. 11, Sec. 25, Tp. 51, Rge. 25 W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 793, 399.
 Truck mine.
 Registered Trade Name: Excel Coal.

Ottewell Coal Co.—Mine No. 91

Authorized Capital: \$20,000.00.
 Name of President: W. J. Ottewell.
 Name of Directors: C. F. and W. J. Ottewell.
 Name of Sec.-Treas.: W. J. Ottewell.

Mine Office: Clover Bar, Alberta.

Mine Manager: W. J. Ottewell.
 Mine Surveyor: L. C. Stevens.
 Overman: Jas. Carson.
 Thickness of Seam: 4 feet.
 Thickness of Cover: 80 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft: 9ft. by 9ft. Depth of Shaft: 90 ft.
 Location of Mine: S.W. $\frac{1}{4}$ L.S. 4, Sec. 17, Tp. 53, Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: Ed. Sak. Land.
 Truck mine.
 Registered Trade Name: Clover Gem Coal.

Great West Coal Co., Ltd.—Mine No. 99

Authorized Capital: \$150,000.
 Name of President: A. C. Dunn.
 Names of Directors: A. C. Dunn, Mayne Reid, W. S. Cupples.
 Name of Secretary-Treasurer: Thomas S. Campbell.
 Head Office: 10157 102nd St., Edmonton, Alberta.
 Mine Office: Clover Bar, Alberta.
 General Manager: A. C. Dunn.
 Mine Manager: Robert Dalziel.
 Mine Surveyor: A. C. Dunn.
 Overman: Angus Park.
 Firebosses: W. Thomson, G. Muri, W. Dalziel, R. Chalmers, H. Harpham, D. Quaife.
 Thickness of Seam: 4 to 6½ feet.
 Thickness of Cover: 140 to 210 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope and Shaft. Size of Shaft: 6ft. by 8ft. Depth of Shaft: 150 to 180 feet. Size of Slope: 10ft. by 6ft. Depth of Slope: 140 feet.
 Location of Mine: S.E. $\frac{1}{4}$ L.S. 10, Sec. 7, Tp. 53, Rge. 23, W. 4th Mer.
 Coal Mining Lease Number: M.S. 235.
 C.N.R. and Truck Mine.
 Registered Trade Name: Black Diamond Coal.

Sundance Mines, Ltd.—Mine No. 129

Authorized Capital: \$20,000.
 Name of President: Paul H. Cote.
 Names of Directors: E. Tucker, Paul A. Cote.
 Name of Sec.-Treas.: E. E. Bishop.
 Head Office: Edmonton, Alberta.
 Mine Office: Cardiff, Alberta.
 Mine Surveyor: L. C. Stevens.
 Overman: E. Christians.
 Thickness of Seam: 8 feet.
 Thickness of Cover: 20 to 30 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 16, Sec. 23, Tp. 55, Rge. 25, W. 4th Mer.
 Coal Mining Lease: C.P.R.
 N.A.R. and Truck mine.
 Registered Trade Name: Suncole.

Banner Coals, Ltd.—Mine No. 428

Authorized Capital: \$20,000.
 Name of Sec.-Treas.: E. A. Mills.
 Head Office: 10631 92nd St., Edmonton, Alberta.
 Mine Office: Carbondale, Alberta.
 General Manager: J. B. Starky.
 Mine Manager: James M. Clyne.
 Mine Surveyor: L. C. Stevens.
 Overman: James Kellock.
 Firebosses: J. Wilkinson, N. Neilson, D. Watson, J. Clyne Sr.
 Thickness of Seam: 4ft. 6in.
 Thickness of Cover: 167 feet.
 Form of Opening: Shaft. Size of Shaft: 14ft. by 8ft. Depth of Shaft: 176 ft.
 Location of Mine: L.S. 10, Sec. 8, Tp. 55, Rge. 24, W. 4th Mer.
 Coal Mining Lease Number: 428.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Penn Coal.

Black Point Mine—Mine No. 1034

Authorized Capital: \$12,000.00.
 Head Office: Box 4124, S. Edmonton, Alberta.
 Mine Manager: S. Yaniv.
 Mine Surveyor: L. C. Stevens.
 Overman: Alex. Scott.
 Thickness of Seam: 4 feet.
 Thickness of Cover: 110 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope: 6ft. by 8ft. Depth of Slope: 250 ft.
 Location of Mine: L.S. 6, Sec. 25, Tp. 51, Rge. 25, W. 4th Mer.
 Coal Mining Lease Number: 4696.
 Truck mine.
 Registered Trade Name: Black Point.

Long Coal Co. Ltd.—Mine No. 1098

Authorized Capital: \$18,000.
 Name of President: M. L. Vitaly.
 Name of Director: A. F. Duncan.
 Name of Sec.-Treas.: Mrs. M. L. Vitaly.
 Mine Office: Namao, Alberta.
 Mine Manager: Mike Vitaly.
 Mine Surveyor: L. C. Stevens.
 Overman: M. L. Vitaly.
 Thickness of Seam: 6 to 8 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Tunnel.
 Location of Mine: L.S. 4, Sec. 31, Tp. 54, Rge. 24, West 4th Mer.
 Coal Mining Lease: Pat. G. S. Long.
 Truck mine.
 Registered Trade Name: Hardite Coal.

Edmonton Collieries, Ltd.—Mine No. 1266

Authorized Capital: \$20,000.
 Name of President: W. Gordon MacKay.
 Names of Directors: William G. MacKay, Harold W. Layton.
 Name of Sec.-Treas.: Harold W. Lawton.
 Head Office: 10322 105th St., Edmonton, Alberta.
 Mine Office: Namao, Alberta.
 General Manager: William G. MacKay.
 Mine Manager: A. Crawford.
 Mine Surveyor: L. C. Stevens.
 Overman: A. Johnstone.
 Fireboss: D. Lamond.
 Thickness of Seam: 8ft. 6in.
 Thickness of Cover: 80 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope: 7ft. by 8ft. Depth of Slope: 475 ft.
 Location of Mine: N.W. $\frac{1}{4}$ Sec. 36, Tp. 54, Rge. 25, W. 4th Mer.
 Coal Mining Lease Number: 1266.
 C.N.R., C.P.R., N.A.R. and Truck mine.
 Registered Trade Name: Black Gem.

Samis Collieries, Ltd.—Mine No. 1316

Mine Office: Namao, Alberta.
 Mine Manager: K. E. Samis.
 Mine Surveyor: L. C. Stevens.
 Overman: E. Fawcett.
 Thickness of Seam: 7ft. to 9ft.
 Thickness of Cover: 75 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope: 6ft. by 7ft. Depth of Slope: 100 ft.
 Location of Mine: L.S. 6, Sec. 36, Tp. 54, Rge. 25, W. 4th Mer.
 Coal Mining Lease Number: 2861, 5539.
 Truck mine.
 Registered Trade Name: Samis Coal.

Red Hot Coal Co., Ltd.—Mine No. 1357

Authorized Capital: \$23,000.
 Name of President: W. Fridel.
 Names of Directors: W. Fridel, Jos. Lang, C. Bruskiewicz, S. Kabacha, J. Tworek, J. Gorski.
 Name of Secretary-Treasurer: J. Lang.
 Mine Office: Forest Heights, Edmonton, Alberta.
 General Manager: William Fridel.
 Mine Manager: W. Smillie.
 Mine Surveyor: L. C. Stevens.
 Firebosses: J. Farmer, J. Smillie.

Thickness of Seam: 4 ft. 6in.
 Thickness of Cover: 180 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope: 7ft. by 6 $\frac{1}{2}$ ft. Depth of Slope: 600 ft.
 Location of Mine: River Lot 33, Edmonton Settlement.
 Coal Mining Lease Number: 5052.
 Truck mine.
 Registered Trade Name: Red Hot Coal.

Beverly Coal Co., Ltd.—Mine No. 1366

Authorized Capital: \$20,000.
 Name of President: L. H. Davidson.
 Names of Directors: L. H. Davidson, A. V. Carlson, Thos. E. Hays.
 Name of Secretary: J. McCartney.
 Name of Treasurer: Thos. E. Hays.
 Mine Office: Beverly, Alberta.
 Mine Surveyor: L. C. Stevens.
 Firebosses: J. Bowie, M. Edwards, Wm. Plesuk, W. J. Price.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 150 feet.
 Inclination of Seam: 1 degree.
 Form of Opening: Shaft. Size of Shaft: 14 $\frac{1}{2}$ ft. by 8ft. Depth of Shaft: 150 ft.
 Location of Mine: L.S. 6, Sec. 13, Tp. 53, Rge. 24, W. 4th Mer.
 Coal Mining Lease Number: H.B.C.
 Truck mine.
 Registered Trade Name: Beverly Coal.

Ottewell Coal Co.—Mine No. 1393

Same particulars as for Mine No. 91.
 Mine Office: Clover Bar.
 Mine Manager: W. J. Ottewell.
 Mine Surveyor: L. C. Stevens.
 Overman: W. J. Ottewell.
 Thickness of Seam: 4 $\frac{1}{2}$ feet.
 Thickness of Cover: 85 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft: 8ft. by 9ft. Depth of Shaft: 85 feet.
 Location of Mine: Block X N.E. $\frac{1}{4}$, Sec. 36, Tp. 52, Rge. 24, W. 4th Mer.
 Registered Trade Name: Marvel Coal.

Pine Creek Coal Co.—Mine No. 1419

Mine Office: R.R. 3, South Edmonton, Alberta.
 Mine Manager: Stephen Fridel.
 Overman: Stephen Fridel.
 Mine Surveyor: L. C. Stevens.
 Thickness of Seam: 4ft. 6in.
 Thickness of Cover: 105 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft: 6ft. by 6ft. Depth of Shaft: 90 feet.
 Location of Mine: L.S. 4, Sec. 25, Tp. 51, Rge. 25, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 5519.
 Truck mine.
 Registered Trade Name: Pine Creek Coal.

Riverdale Coal Co., Ltd.—Mine No. 1463

Authorized Capital: \$10,000.
 Name of President: John Mather.
 Names of Directors: John Mather, Anne Mather, Cecile Mather.
 Name of Secretary: Cecile Mather.
 Name of Treasurer: Anne Mather.
 Head Office: 10311 Saskatchewan Drive, Edmonton, Alberta.
 Mine Office: Namao, Alberta.
 General Manager: John Mather.
 Mine Manager: Tom Mather.
 Mine Surveyor: David Jones.
 Overman: John March.
 Fireboss: J. McMillan.
 Thickness of Seam: 4 feet.
 Thickness of Cover: 90 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 14, Sec. 8, Tp. 55, Rge. 24, West 4th Mer.
 C.N.R., C.P.R. and Truck mine.
 Registered Trade Name: Dependable Coal.

G. S. Gwilliam—Mine No. 1496

Mine Office: Namao, Alberta.
 Mine Manager: G. S. Gwilliam.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 60 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 3, Sec. 6, Tp. 55, Rge. 24, W. 4th Mer.
 Coal Mining Lease Number: 5456.
 Registered Trade Name: Back Beauty Coal.

Nimko Coal Mine—Mine No. 1560

Mine Office: Edmonton South, Alberta.
 Mine Manager: Kost Nimko.
 Mine Surveyor: L. C. Stevens.
 Overman: K. Nimko.
 Fireboss: K. Nimko.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 140 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope: 7ft. by 7ft. Depth of Slope: 140 ft.
 Location of Mine: L.S. 11, Sec. 25, Tp. 51, Rge. 25, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 623.
 Truck mine.
 Registered Trade Name: White Mud Creek Coal.

Egg Lake Coal Co.—Mine No. 1582

Mine Office: Morinville, Alberta.
 Mine Manager: H. Paepe, T. J. Logan.
 Mine Surveyor: David Jones.
 Fireboss: H. Gaepe.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 16 to 20 feet.
 Form of Opening: Strip mine.
 Location of Mine: N.E. $\frac{1}{4}$, Sec. 36, Tp. 56, Rge. 26, W. 4th Mer.
 Truck mine.
 Registered Trade Name: Egg Lake Coal.

J. B. Starky Co., Ltd.—Mine No. 1626

Authorized Capital: \$250,000.00.
 Name of President: J. B. Starky.
 Name of Sec.-Treas.: Ed. Mills.
 Head Office: 10631 92nd St., Edmonton, Alberta.
 Mine Office: R.R. No 2, St. Albert, Alta.
 General Manager: W. T. Worthington Sr.
 Mine Surveyor: W. T. Worthington Jr.
 Overman: J. F. Brown.
 Firebosses: S. P. Kendrick, C. Crawford, J. Parobchuk, W. Worthington, J. Parker, H. Wales.
 Thickness of Seam: 10 feet.
 Thickness of Cover: 75 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft and Slope. Size of Shaft: 8ft. by 6ft. Depth of Shaft: 75 ft. Size of Slope: 7ft. by 7ft. Depth of Slope: 210 feet.
 Location of Mine: L.S. 4, Sec. 36, Tp. 54, Rge. 25, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 610, 35551, 35552.
 N.A.R. and Truck mine.
 Registered Trade Name: Star-Key Coal.

Carbondale Collieries—Mine No. 1627

Authorized Capital: \$6,000.
 Mine Office: Carbondale, Alberta.
 General Manager: W. Dickinson.
 Mine Manager: J. Kennedy.
 Mine Surveyor: L. C. Stevens.
 Fireboss: M. Knight.
 Thickness of Seam: 5ft. 8in.
 Thickness of Cover: 60 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Entry.
 Location of Mine: S.E. $\frac{1}{4}$, Sec. 17, Tp. 55, Rge. 24, W. 4th Mer.
 Truck mine.
 Registered Trade Name: Carbondale Coal.

Mike Sinoski & Partners—Mine No. 1628

Mine Office: Box 4024, South Edmonton, Alberta.

General Manager: Mike Sinoski.
 Mine Manager: Steve Sinoski.
 Mine Surveyor: L. C. Stevens.
 Overman: Steve Sinoski.
 Fireboss: Steve Sinoski.
 Thickness of Seam: 3ft. 4in. to 4ft.
 Thickness of Cover: 150 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Shaft. Size of Shaft: 8ft. by 8ft. Depth of Shaft: 100 feet.
 Location of Mine: L.S. 15, Sec. 23, Tp. 51, Rge. 25, West 4th Mer.
 Coal Mining Lease Number: 578.
 Truck mine.
 Registered Trade Name: Blue Point Coal.

Beaver Hills Coal Mine—Mine No. 1632

Head Office: 10123 117th St., Edmonton, Alberta.
 Mine Office: Ardrossan, Alberta.
 General Manager: C. T. MacLachlan.
 Mine Surveyor: L. C. Stevens.
 Overman: M. Olson.
 Thickness of Seam: 6ft. to 7ft.
 Thickness of Cover: 25 feet.
 Location of Mine: N. $\frac{1}{4}$ L.S. 8 and 9, Sec. 2, Tp. 53, Rge. 21, W. 4th Mer.
 Coal Mining Lease Number: 5542.
 Truck mine.
 Registered Trade Name: Beaver Hills Coal.

J. Camarta—Mine No. 1635

Mine Office: Morinville, Alberta.
 Mine Manager: John Camarta.
 Mine Surveyor: L. C. Stevens.
 Overman: Jim McDonald.
 Thickness of Seam: 7 feet.
 Inclination of Seam: Horizontal.
 Location of Mine: L.S. 1, Sec. 32, Tp. 55, Rge. 25, W. 4th Mer.
 Registered Trade Name: Spitfire Coal.

Legal Coal Mine—Mine No. 1636

Authorized Capital: \$1,200.00.
 Mine Office: Legal, Alberta.
 Mine Manager: D. Chiarello.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 12 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 11 and 14, Sec. 26, Tp. 57, Rge. 25, W. 4th Mer.
 Truck mine.
 Registered Trade Name: Legal Coal.

A. Horkulak—Mine No. 1641

Mine Office: Rabbit Hill, Alberta.
 Mine Surveyor: L. C. Stevens.
 Overman: A. H. Horkulak.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 100 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope: 6ft. by 7ft. Depth of Slope: 90 ft.
 Location of Mine: E. $\frac{1}{2}$ of L. S. 15 and 16, Sec. 26, Tp. 51, Rge. 25, West 4th Mer.
 Coal Mining Lease Number: 5520.
 Truck mine.
 Registered Trade Name: Rabbit Hill Coal.

J. G. Mucha—Mine No. 1646

Authorized Capital: \$10,000.
 Mine Office: Box 4027, South Edmonton, Alberta.
 Mine Manager: J. G. Mucha.
 Overman: J. G. Mucha.
 Surveyor: L. C. Stevens.
 Thickness of Seam: 4 feet.
 Thickness of Cover: 10 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 13, Sec. 25, Tp. 51, Rge. 25, West 4th Mer.
 Coal Mining Lease Number: 622.
 Truck mine.
 Registered Trade Name: Bright Service Coal.

**T. Opalinski & R. Klapstein—
Mine No. 1658**

Mine Office: Ellerslie, Alberta.
Mine Surveyor: L. C. Stevens.
Overman: R. Klapstein.
Thickness of Seam: 2 feet.
Thickness of Cover: 10 feet.
Inclination of Seam: Horizontal.
Form of Opening: Strip mine.
Location of Mine: L.S. 15, Sec. 25, Tp. 51, Rge. 25, West 4th Mer.
Coal Mining Lease Number: 637.
Truck mine.
Registered Trade Name: Ellerslie Coal.

GLEICHEN AREA

Blackfoot Indians—Mine No. 72a

This mine is operated on the Blackfoot Reserve by the Indians, the entire output being disposed of locally. This Reserve is south of Gleichen.
Mine Surveyor: G. Kidd.
Form of Opening: Drift.
Truck mine.

Karl Schnepf—Mine No. 299

Mine Office: Rosebud, Alberta.
Mine Manager: K. Schnepf.
Mine Surveyor: Gordon L. Kidd.
Overman: K. Schnepf.
Thickness of Seam: 3 feet.
Thickness of Cover: 55 feet.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope: 6ft. by 6ft. Depth of Slope: 160 feet.
Location of Mine: S. ½ L.S. 4 and 5, Sec. 29, Tp. 26, Rge. 21, West 4th Mer.
Coal Mining Lease Number: C.P.R.
Truck mine.
Registered Trade Name: Bright Hard Coal.

H. Castella & Sons—Mine No. 1265

Mine Office: Standard, Alberta.
Mine Manager: J. Castella.
Mine Surveyor: Gordon L. Kidd.
Overman: J. Castella.
Fireboss: M. A. Castella.
Thickness of Seam: 3ft. 10in.
Thickness of Cover: 80 feet.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope: 5ft. by 9ft. Depth of Slope: 110 feet.
Location of Mine: L.S. 5, Sec. 11, Tp. 25, Rge. 22, W. 4th Mer.
Coal Mining Lease Number: 394 C.P.R.
Truck mine.
Registered Trade Name: Standard Coal.

John Guiney—Mine No. 1431

Mine Office: Rosebud, Alberta.
Mine Manager: J. Guiney.
Mine Surveyor: Gordon L. Kidd.
Overman: J. Guiney.
Thickness of Seam: 3 feet.
Thickness of Cover: 60 to 90 feet.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope: 6ft. by 6ft. Depth of Slope: 30 feet.
Location of Mine: L.S. 3, Sec. 29, Tp. 26, Rge. 21, West 4th Mer.
Coal Mining Lease Number: C.P.R.
Truck mine.
Registered Trade Name: Consumer's Coal.

Wm. McMillan—Mine No. 1521

Mine Office: Rosebud, Alberta.
Mine Surveyor: Gordon L. Kidd.
Overman: Alex. McMillan.
Fireboss: C. E. Smith.
Thickness of Seam: 3½ feet.
Thickness of Cover: 1 to 100 feet.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope: 5ft. by 8ft. Depth of Slope: 140 ft.
Location of Mine: L.S. 14, Sec. 20, Tp. 26, Rge. 21, W. 4th Mer.
Coal Mining Lease Number: C.P.R. 551.
Truck mine.

Registered Trade Name: Supreme of the Valley Coal.

HALCOURT AREA

Baldwin Collieries—Mine No. 651

Mine Office: Dimsdale, Alberta.
Mine Manager: Ernest Cumber.
Mine Surveyor: David Jones.
Overman: Ernest Cumber.
Thickness of Seam: 2ft. 8in.
Thickness of Cover: 90 feet.
Inclination of Seam: Horizontal.
Form of Opening: Tunnel.
Location of Mine: L. S. 15, Sec. 35, Tp. 70, Rge. 7, W. 6th Mer.
Coal Mining Lease Number: 2737.
Truck mine.
Registered Trade Name: Globe Coal.

Cage Brothers—Mine No. 1588

Mine Office: Halcourt, Alberta.
Mine Manager: R. W. Cage.
Mine Surveyor: David Jones.
Overman: Jim Cage.
Thickness of Seam: 30 inches.
Inclination of Seam: Horizontal.
Location of Mine: L.S. 14, Sec. 24, Tp. 70, Rge. 11, West 6th Mer.
Coal Mining Lease Number: 5424.
Truck mine.
Registered Trade Name: Hillside Coal.

Wm. Fraser—Mine No. 1633

Mine Office: Halcourt, Alberta.
Mine Manager: Wm. Fraser.
Mine Surveyor: David Jones.
Thickness of Seam: 2 feet.
Thickness of Cover: 20 feet.
Inclination of Seam: Horizontal.
Location of Mine: L.S. 8, Sec. 21, Tp. 70, Rge. 10, West 6th Mer.
Coal Mining Lease Number: 5562.
Truck mine.
Registered Trade Name: Fraser Coal.

R. O. Johnston & Sons—Mine No. 1647

Head Office: Grande Prairie.
Overman: David Whyte Sr.
Thickness of Seam: 30 inches.
Thickness of Cover: 60 feet.
Inclination of Seam: Horizontal.
Form of Opening: Tunnel.
Location of Mine: Unsurveyed Territory, Tp. 69, Rge. 5, West 6th Mer.
Coal Mining Lease Number: 5462.
Truck mine.
Registered Trade Name: Big Mountain Creek Coal.

LETHBRIDGE AREA

A. Razzolini—Mine No. 56

Mine Office: Magrath, Alberta.
Mine Manager: A. Razzolini.
Mine Surveyor: Gordon L. Kidd.
Overman: Albert Razzolini.
Thickness of Seam: 3ft. 6in.
Thickness of Cover: 200 feet.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope: 5½ft. by 5½ft. Depth of Slope: 400 feet.
Location of Mine: L.S. 3, Sec. 7, Tp. 7, Rge. 21, West 4th Mer.
Coal Mining Lease Number: Pat G. Russell.
Truck mine.
Registered Trade Name: Baker Coal.

George Rollingson—Mine No. 738

Mine Office: Box 432, Lethbridge, Alta.
Mine Manager: George Rollingson.
Mine Surveyor: J. F. Hamilton.
Overman: George Rollingson.
Thickness of Seam: 2 feet.
Thickness of Cover: 20 to 200 feet.
Inclination of Seam: Horizontal.
Form of Opening: Drift.

Location of Mine: L.S. 2, Sec. 11, Tp. 8,
Rge. 22, W. 4th Mer.
Coal Mining Lease Number: 5522.
Truck mine.
Registered Trade Name: Woopup Coal.

Chester Mine—Mine No. 1095

Head Office: Box 5, Lethbridge, Alberta.
General Manager: J. C. Chester.
Mine Surveyor: J. F. Hamilton.
Overman: D. J. Crabb.
Fireboss: J. Chemottl.
Thickness of Seam: 4ft. 2in.
Thickness of Cover: 300 feet.
Inclination of Seam: 2 degrees.
Form of Opening: Slope. Size of Slope:
6ft. by 7ft. Depth of Slope: 257 ft.
Location of Mine: L.S. 9, Sec. 30, Tp. 9,
Rge. 21, W. 4th Mer.
Coal Mining Lease Number: 5197.
Truck and C.P.R. mine.
Registered Trade Name: Royal Coal.

Lethbridge Collieries, Ltd.—Mine No. 1263

Authorized Capital: \$1,400,000.
Name of President: L. Munroe.
Names of Directors: Leslie Munroe, E.
A. Lovett, C. S. Donaldson, Wm.
Toole, A. E. Whitmore.
Name of Secretary: C. T. Webb.
Name of Treasurer: R. V. Maynard.
Head Office: 137 9th Avenue East, Cal-
gary, Alberta.
Mine Office: Lethbridge, Alberta.
General Manager: J. M. Davidson.
Mine Surveyor: R. D. Livingstone.
Overman: F. Thackray.
Firebosses: M. Boychuk, J. Guisto, J.
C. Macaulay, A. Birse, C. Woodrick,
O. W. Krossa.
Thickness of Seam: 5 feet.
Thickness of Cover: 263 feet.
Inclination of Seam: Dip 2 N. 56 de-
grees W.
Form of Opening: Shaft. Size of Shaft:
9ft. by 24ft. Depth of Shaft: 263 feet.
Location of Mine: L.S. 11, Sec. 30, Tp. 10,
Rge. 21, W. 4th Mer.
Coal Mining Lease Number: 2591.
Mine located on C.P.R.
Registered Trade Name: Cadillac Coal.

Lethbridge Collieries, Ltd.—Mine No. 1464

Same particulars as for Mine No. 1263.
Mine Manager: J. Brady.
Overman: H. Tyrer.
Firebosses: D. Coutts, R. Dobson, C.
Coutts, W. Strickland, J. Stewart, J.
Peta, A. McColl.
Thickness of Seam: 4 feet.
Thickness of Cover: 400 feet.
Inclination of Seam: 1 in 75 N. 80° W.
Form of Opening: Shaft. Size of Shaft:
18ft. by 20ft. Depth of Shaft: 359 ft.
Location of Mine: L.S. 3, Sec. 2, Tp. 9,
Rge. 22, W. 4th Mer.
Coal Mining Lease Number: 627-630.
Mine located on C.P.R.
Registered Trade Name: Galt Coal.

J. J. Hamilton Coal Co.—Mine No. 1531

Mine Office: 413 8th St. South, Leth-
bridge, Alberta.
Mine Manager: J. J. Hamilton.
Mine Surveyor: J. F. Hamilton.
Overman: E. Tyrer.
Firebosses: D. Howell, F. Peta.
Thickness of Seam: 4 feet.
Thickness of Cover: 240 to 450 feet.
Inclination of Seam: 2 degrees N.W.
Form of Opening: Shaft. Size of Shaft:
8ft. by 8ft. and 9ft. by 8ft. Depth
of Shaft: 240 feet.
Location of Mine: L.S. 11, Sec. 24, Tp. 9,
Rge. 22, W. 4th Mer.
Coal Mining Lease Number: 5870.
C.N.R., C.P.R., and Truck mine.
Registered Trade Name: Federal Coal.

MORLEY AREA

B. Ainsley & Sons—Mine No. 1619

Mine Office: Morley, Alberta.
General Manager: R. J. Ainsley.
Mine Manager: H. Hillery.
Mine Surveyor: Gordon L. Kidd.
Overman: H. Hillery.
Thickness of Seam: 6 feet.
Thickness of Cover: 75 feet.
Inclination of Seam: 25° S.W.
Form of Opening: Slope. Size of Slope:
7ft. by 7ft. Depth of Slope: 200 feet.
Location of Mine: S. ½ Sec. 3, Tp. 27,
Rge. 7, West 5th Mer.
C.P.R. and Truck mine.
Lease No. H.O.5.
Registered Trade Name: Fire Cloud Coal.

MOUNTAIN PARK AREA

Mountain Park Coals, Ltd.—Mine No. 282

Authorized Capital: \$1,042,430.
Name of President: A. M. Mitchell.
Names of Directors: A. M. Mitchell, C.
F. Bentley, A. C. Dunn, M.E., Col.
Sir Harold P. Mitchell, Bart., J.P.,
D.L., T. Dickson, O.B.E., J. C. George,
M.E., M.L., Min.E., Col. M. E. Lind-
say, D.S.O., Mayne Reid, K.C., A.
Elliott Russell, Andrew N. Scott, F.
H. Wood.
Name of Sec.-Treas.: Chas. F. Bentley.
Head Office: 179 Queen Street, Char-
lottetown, P.E.I.
Mine Office: Mountain Park, Alberta.
General Manager: A. N. Scott.
Mine Manager: D. C. Hamilton.
Mine Surveyor: Andrew Scott, Jr.
Overman: J. A. Henderson.
Firebosses: S. Olesky, A. Stene, A.
Wright, A. Emblau, J. Brugos, H.
Roome, W. Aitken, F. Norris.
Thickness of Seam: 24 to 28 feet.
Thickness of Cover: 250 to 800 feet.
Inclination of Seam: 38 degrees.
Form of Opening: Slope. Size of Slope:
7ft. by 10ft.
Location of Mine: Sec. 33, Tp. 45, Rge.
23, West 5th Mer.
Coal Mining Lease Numbers: 5043, 5050.
Mine located on C.N.R.
Registered Trade Name: Mountain Park
Coal.

Cadomin Coals, Ltd.—Mine No. 693

Authorized Capital: \$1,200,000.
Name of President: H. R. Milner.
Names of Directors: A. C. Emery, S. W.
Field, T. M. Burnett, J. A. McLeod,
H. W. Riley Jr.
Name of Sec.-Treasurer: Colin Campbell.
Head Office: 418 McLeod Bldg., Edmon-
ton, Alberta.
Mine Office: Cadomin, Alberta.
General Manager: J. A. McLeod.
Mine Manager: N. Melnyk.
Mine Surveyor: D. F. MacKinnon.
Overmen: P. S. Douglas Jr., R. J. Carr.
Firebosses: P. Nicholson, W. Driega, S.
Chesney, S. Wilson, Jos. James, M. V.
Stene, J. Herman, J. B. Williamson,
F. Gosney, H. McKenna.
Thickness of Seam: 35 feet.
Inclination of Seam: 35 degrees.
Form of Opening: Shaft and Slope. Depth
of Shaft: 900 feet. Depth of Slope:
1,200 feet.
Location of Mine: L.S. 14, Sec. 31, Tp. 46,
Rge. 23, W. 5th Mer.
Coal Mining Lease Numbers: 5061, 5082.
Mine located on C.N.R.
Registered Trade Name: Rocky Mountain
Splint Coal.

Luscar Coals, Ltd.—Mine No. 905

Authorized Capital: \$650,000.
Name of President: A. M. Mitchell.
Names of Directors: M. Reid, A. N. Scott,

A. Dunn, T. Dickson, G.P. Nance.
 Name of Sec.-Treas.: G. P. Nance.
 Head Office: 410 Tegler Bldg., Edmonton, Alberta.
 Mine Office: Luscar, Alberta.
 General Manager: A. N. Scott.
 Mine Manager: R. Evans.
 Mine Surveyor: Andrew Scott Jr.
 Overmen: H. Evans, T. Mather, W. J. Thomas.
 Firebosses: J. Jones, R. Mitchell, J. Henderson, R. Davies, J. Hogg, R. Baker, V. Baich, P. Mahoney, W. Hughes.
 Location of Mine: L.S. 7, Sec. 23, Tp. 47, Rge. 24, W. 5th Mer.
 Thickness of Seam: 30 feet.
 Thickness of Cover: Varies.
 Inclination of Seam: Up to 90°.
 Form of Opening: Slope and Drift. Size of Slope: 11ft. by 8ft. Depth of Slope: 833 feet.
 Mine located on C.N.R.
 Coal Mining Lease Numbers: 1651, 5213.
 Registered Trade Name: Luscar Coal.

**Gregg River Collieries Ltd.—
 Mine No. 1392**

Authorized Capital: \$250,000.00.
 Name of President: H. R. Milner.
 Names of Directors: A. C. Emery, J. A. McLeod, T. M. Burnett, H. W. Riley Jr., S. W. Field.
 Name of Sec.-Treas.: Colin Campbell.
 Head Office: Cadomin, Alberta.
 General Manager: J. A. McLeod.
 Mine Manager: J. Roberts.
 Mine Surveyor: A. L. Clement.
 Firebosses: W. Grubisch, J. Denholm.
 Thickness of Seam: 30 feet.
 Thickness of Cover: 20 feet.
 Inclination of Seam: 35 degrees.
 Form of Opening: Strip Mine.
 Location of Mine: L.S. 8, Sec. 28, Tp. 47, Rge. 24, West 5th Mer.
 Mine located on C.N.R.
 Registered Trade Name: Gregg River Coal.

NORDEGG AREA

Brazeau Collieries, Ltd.—Mine No. 256

Authorized Capital: \$4,000,000.
 Name of President: J. A. Boyd.
 Name of Secretary: H. S. Gausby.
 Name of Treasurer: H. S. Gausby.
 Head Office: 1720 17th Floor, 25 King St. West, Toronto, Ont.
 Mine Office: Nordegg, Alberta.
 General Manager: A. D. Sturrock.
 Mine Manager: D. Shanks.
 Mine Surveyor: T. Hodson.
 Overmen: J. B. Touhey, J. Hall.
 Firebosses: J. S. Barton, J. Henderson, G. McQueen, R. Whyte, O. Edwards, G. Minue, A. Blasetti, J. China.
 Thickness of Seam: 14 feet.
 Thickness of Cover: 400 feet.
 Inclination of Seam: 12 degrees.
 Form of Opening: Slope. Size of Slope: 10ft. by 10ft. Depth of Slope: 3,400 feet.
 Location of Mine: Tp. 40, Rge. 15, West 5th Mer.
 Coal Mining Lease Numbers: 591, 5101.
 Mine located on C.N.R.
 Registered Trade Name: Brazeau Bituminous Steam Coal.

Brazeau Collieries, Ltd.—Mine No. 1585

Same particulars as for Mine No. 256.
 Mine Manager: A. McMullen.
 Mine Surveyor: T. Hodson.
 Overman: A. McQueen.
 Firebosses: D. Duncan, J. White, John White, H. Williams.
 Thickness of Seam: 6 feet.
 Inclination of Seam: 12 degrees.
 Thickness of Cover: 300 feet.
 Form of Opening: Slope. Size of Slope: 6ft. by 12ft. Depth of Slope: 3,900 ft.

Location of Mine: Tp. 40, Rge. 15, West 5th Mer.
 Coal Mining Lease Number: 591.
 Mine located on C.N.R.
 Registered Trade Name: Brazeau Bituminous Steam Coal.

PAKOWKI AREA

William Raeder—Mine No. 1318

Mine Office: Elkwater, Alberta.
 Mine Surveyor: E. Ashburner.
 Overman: Wm. Raeder.
 Thickness of Seam: 5ft 6in.
 Thickness of Cover: 200 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Drift.
 Location of Mine: L.S. 10, Sec. 23, Tp. 8, Rge. 3, West 4th Mer.
 Coal Mining Lease Number: 2890.
 Registered Trade Name: Elkwater Coal.

PEKISKO AREA

G. C. Davies—Mine No. 1516 *

Name of Company: O.V. Coal Co.
 Authorized Capital: \$10,000.00.
 Head Office: Priddis, Alberta.
 Mine Office: Priddis, Alberta.
 Mine Manager: G. C. Davies.
 Mine Surveyor: L. C. Stevens.
 Overman: G. C. Davies.
 Thickness of Seam: 3ft 4in.
 Thickness of Cover: 125 feet.
 Inclination of Seam: 12°.
 Form of Opening: Slope. Size of Slope: 7ft. by 6 ft.
 Location of Mine: L.S. 10, Sec. 4, Tp. 22, Rge. 3, W. 5th Mer.
 Coal Mining Lease Number: 5614.
 Truck mine.
 Registered Trade Name: O.V. Coal.

E. Payne—Mine No. 1638

Head Office: 333 11th Ave. W., Calgary.
 Mine Office: Turner Valley.
 Mine Manager: E. Payne.
 Thickness of Seam: 50 feet.
 Thickness of Cover: 2 to 20 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mining.
 Location of Mine: L.S. 7, Sec. 24, Tp. 19, Rge. 6, West 5th Mer.
 Coal Mining Lease Number: 5589.
 Truck mine.
 Registered Trade Name: E.P. Coal.

PEMBINA AREA

Lakeside Coals, Ltd.—Mine No. 419

Authorized Capital: \$660,000.
 Name of President: W. A. McBain.
 Names of Directors: W. A. McBain, J. T. Sangwin, W. N. McBain.
 Name of Sec.-Treas.: J. T. Sangwin.
 Head Office: Edmonton, Alberta.
 Mine Office: Wabamun, Alberta.
 Mine Manager: John Vivyurka.
 Mine Surveyor: David Jones.
 Overman: John Schymizek.
 Firebosses: W. Koehler, F. Kerr, R. Woods.
 Thickness of Seam: 7½ to 8 feet.
 Thickness of Cover: 70 to 85 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Tunnel.
 Location of Mine: L.S. 15, Sec. 9, Tp. 53, Rge. 4, West 5th Mer.
 Coal Mining Lease Number: 5486.
 Mine located on C.N.R.
 Registered Trade Name: Victory Coal.

**Gainford Collieries (1946) Ltd.—
 Mine No. 1409**

Mine Office: Gainford, Alberta.
 Mine Manager: P. B. Abernathy.
 Mine Surveyor: David Jones.
 Overman: P. B. Abernathy.
 Thickness of Seam: 9 to 11 feet.

Inclination of Seam: Horizontal.
Form of Opening: Drift.
Location of Mine: S.E. $\frac{1}{4}$ of Sec. 34, Tp. 53, Rge. 6, West of 5th Mer.
Coal Mining Lease Number: 5099.
Registered Trade Name: Gain-Heat Coal.

Pembina Collieries Ltd.—Mine No. 1495
Mine Office: Entwistle, Alberta.
Mine Manager: C. Ostertag.
Mine Surveyor: David Jones.
Overman: C. Ostertag.
Thickness of Seam: 5ft. 6in.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope: 5ft. by 6ft. Depth of Slope: 75 feet.
Location of Mine: N.W. $\frac{1}{4}$ of Sec. 34, Tp. 53, Rge. 7, West 5th Mer.
Coal Mining Lease Number: 238C.
Registered Trade Name: Pembina Peerless Coal.

Donvie Collieries Ltd.—Mine No. 1592
Mine Office: Gainford, Alberta.
Mine Manager: O. Jacobi.
Mine Surveyor: David Jones.
Overman: O. Jacobi.
Thickness of Seam: 20 feet.
Inclination of Seam: Horizontal.
Form of Opening: Strip mine.
Location of Mine: E. $\frac{1}{2}$, Sec. 30, Tp. 52, Rge. 4, W. 5th Mer.
Coal Mining Lease Number: 5442.
Truck mine.
Registered Trade Name: Sunburst Coal.

Wm. Robinson—Mine No. 1596
Mine Office: Entwistle, Alberta.
Mine Manager: G. Ostertag.
Mine Surveyor: David Jones.
Overman: Mr. Hodgkinson.
Thickness of Seam: 28 feet.
Inclination of Seam: Horizontal.
Form of Opening: Strip mine.
Location of Mine: L.S. 5, Sec. 34, Tp. 53, Rge. 7, W. 5th Mer.
Truck mine.
Registered Trade Name: Goose Quill Coal.

Strawberry Creek Coal Co. Ltd.—Mine No. 1644
Authorized Capital: \$20,000.
Name of President: Leslie G. Karsay.
Names of Directors: L. G. Karsay, Leslie Liba, Louis Kazinsky.
Name of Secretary: Wm. Fode.
Name of Treasurer: Elaine Liba.
Mine Office: Warburg, Alberta.
Mine Manager: Thos. J. Shaw.
Mine Surveyor: David Jones.
Fireboss: Louis Kozinsky.
Thickness of Seam: 4 feet 6 ins.
Thickness of Cover: 12 to 80 feet.
Form of Opening: Slope. Size of Slope: 8 by 7 feet. Depth of Slope: 184 feet.
Location of Mine: S.W. $\frac{1}{4}$ Sec. 13, Tp. 49, Rge. 3, W. 5th Mer.
C.P.R. and truck mine.
Registered Trade Name: Strawberry Creek Coal.

Lothain Collieries Ltd.—Mine No. 1645
Authorized Capital: \$30,000.00.
Name of President: A. N. Scott.
Names of Directors: A. N. Scott, W. Foster, R. Spanach.
Name of Sec.-Treas.: Geo. Finlay.
Head Office: 308 Agency Bldg., Edmonton, Alberta.
Mine Office: Wabamun, Alberta.
Mine Manager: Wm. Foster.
Mine Surveyor: Wm. Foster.
Thickness of Seam: 9 feet.
Thickness of Cover: 20 to 25 feet.
Inclination of Seam: Horizontal.
Form of Opening: Strip mine.
Location of Mine: N.E. $\frac{1}{4}$ of Sec. 10, Tp. 53, Rge. 4, West of 5th Mer.

C.N.R. and Truck mine.
Registered Trade Name: Blue Flame Coal.

J. Lidgett & L. Opheim—Mine No. 1657
Mine Office: Entwistle, Alberta.
Mine Surveyor: David Jones.
Overman: James Lidgett.
Thickness of Seam: 4ft. 6in.
Thickness of Cover: 100 feet.
Inclination of Seam: Horizontal.
Form of Opening: Level.
Location of Mine: S. $\frac{1}{2}$ of L.S. 16 and 9, Sec. 10, Tp. 54, Rge. 7, West 5th Mer.
Coal Mining Lease Number: 5619.
Truck mine.
Registered Trade Name: O. & L. Coal.

PINCHER AREA

Keith Coal Co.—Mine No. 59
Mine Office: Lundbreck, Alberta.
Mine Surveyor: Albert Keith.
Overman: Albert Keith.
Thickness of Seam: 6 feet.
Inclination of Seam: 20 to 50 feet.
Form of Opening: Slope. Size of Slope: 7ft. by 10ft. Depth of Slope: 400 ft.
Location of Mine: S.W. $\frac{1}{4}$ of L.S. 15, Sec. 26, Tp. 7, Rge. 2, West 5th Mer.
Coal Mining Lease Number: C.L.S. 93.
Registered Trade Name: Red Devil Coal.

Rhodes Mining Co.—Mine No. 1440
Authorized Capital: \$500.00.
Names of Directors: W. B. Rhodes and P. Rhodes.
Mine Office: Lundbreck, Alberta.
Mine Manager: W. B. Rhodes.
Overman: W. B. Rhodes.
Thickness of Seam: 8 to 10 feet.
Thickness of Cover: Outcrop.
Inclination of Seam: 70°.
Form of Opening: Slope. Size of Slope: 7ft. by 6ft. Depth of Slope: 95 feet.
Location of Mine: L.S. 10, Sec. 26, Tp. 7, Rge. 2, W. 5th Mer.
Coal Mining Lease: Freehold.
Truck mine.
Registered Trade Name: Quick Flame Coal.

PRAIRIE CREEK AREA

C. M. Woodley & Partners—Mine No. 1653
Mine Office: Hinton, Alberta.
Mine Manager: Harold Rhodes.
Mine Surveyor: L. C. Stevens.
Overman: Harold Rhodes.
Thickness of Seam: 10 feet.
Thickness of Cover: 40 feet.
Inclination of Seam: 18°.
Form of Opening: Slope. Size of Slope: 5ft. by 8ft. Depth of Slope: 270 feet.
Location of Mine: L.S. 4, Sec. 29, Tp. 50, Rge. 25, West 5th Mer.
Coal Mining Lease Number: 5602.
C.N.R. and Truck mine.
Registered Trade Name: Red Glow Coal.

REDCLIFF AREA

Naco Coal Co.—Mine No. 772
Head Office: 332 Aberdeen St., Medicine Hat, Alberta.
Mine Office: Medicine Hat, Alberta.
General Manager: G. Naylor.
Mine Manager: Peter Barclay.
Mine Surveyor: J. F. Hamilton.
Overman: Peter Barclay.
Firebosses: Alfred Wolff, M. Valentino.
Thickness of Seam: 4 feet.
Thickness of Cover: 0 to 250 feet.
Inclination of Seam: Horizontal.
Form of Opening: Drift.
Location of Mine: L.S. 3, Sec. 5, Tp. 13, Rge. 6, W. 4th Mer.
Coal Mining Lease: C.P.R.
C.P.R. and Truck mine.
Registered Trade Name: Naco Coal.

ROCHESTER AREA

Thorhild Coal Co.—Mine No. 1517

Authorized Capital: \$18,000.00.
 Mine Office: Thorhild, Alberta.
 Mine Manager: John Libicz.
 Mine Surveyor: David Jones.
 Overman: John Libicz.
 Thickness of Seam: 6 feet.
 Thickness of Cover: 15 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: Sec. 12, Tp. 60, Rge. 21, W. 4th Mer.
 Coal Mining Lease Number: 5275.
 C.N.R. and Truck mine.
 Registered Trade Name: Dandy Coal.

North Point Coal Co., Ltd.—Mine No. 1562

Authorized Capital: \$10,876.00.
 Mine Office: Thorhild, Alberta.
 Mine Manager: T. Dombroski.
 Mine Surveyor: David Jones.
 Overman: T. Dombroski.
 Thickness of Seam: 5½ feet.
 Thickness of Cover: 14 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 1, Sec. 11, Tp. 60, Rge. 21, W. 4th Mer.
 Coal Mining Lease Number: S.L. 526.
 Truck mine.
 Registered Trade Name: The North Point Coal.

SAUNDERS AREA

Bighorn & Saunders Creek Collieries, Ltd.—Mine No. 388

Authorized Capital: \$300,000.
 Name of President: Raoul Green.
 Names of Directors: W. G. Pearson, L. P. Robert, W. Bird, Dean Harrington.
 Name of Sec.-Treasurer: A. R. Granger.
 Head Office: Blairmore, Alberta.
 Mine Office: Saunders, Alberta.
 Mine Manager: Owen Morgan.
 Mine Surveyor: Owen Morgan.
 Overman: L. C. Gladwin.
 Firebosses: R. Cowley, P. Kelly, J. Nelson.
 Thickness of Seam: 4ft. 9in.
 Thickness of Cover: 300 feet.
 Inclination of Seam: 7°.
 Form of Opening: Slope. Size of Slope: 8ft. by 6ft. Depth of Slope: 2,200 ft.
 Location of Mine: Sec. 24, Tp. 40, Rge. 13, West 5th Mer.
 Coal Mining Lease Number: 5162.
 Mine located on C.N.R.
 Registered Trade Name: Bighorn and Saunders Creek Collieries Ltd.

Alexo Coal Co., Ltd.—Mine No. 852

Authorized Capital: \$200,000.
 Name of President: E. F. Pullen.
 Names of Directors: E. F. Pullen, Frank Pullen, C. C. Clark, H. E. Hanning, G. S. Robertson.
 Name of Sec.-Treas.: C. C. Clark.
 Head Office: Toronto, Ont.
 Mine Office: Alexo, Alberta.
 General Manager: G. S. Robertson.
 Mine Manager: R. Tennant.
 Mine Surveyor: A. McMullen.
 Overman: D. Williamson.
 Firebosses: A. Broderick, R. J. Butts.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 250 feet.
 Inclination of Seam: 7 degrees.
 Form of Opening: Slope. Size of Slope: 8ft. by 12ft. Depth of Slope: 2,400 ft.
 Location of Mine: L.S. 9, Sec. 27, Tp. 40, Rge. 13, W. 5th Mer.
 Coal Mining Lease Number: 5404.
 Mine located on C.N.R.
 Registered Trade Name: Alexo and Acorn.

SHEERNES AREA

Chinook Coal Co., Ltd.—Mine No. 443

Authorized Capital: \$50,000.00.
 Name of President: Claude Gallinger.
 Names of Directors: Claude Gallinger, Mrs. Jean Gallinger, R. Gallinger, Mrs. R. L. Wood, R. L. Wood.
 Name of Sec.-Treasurer: R. L. Wood.
 Mine Office: Sheerness, Alberta.
 General Manager: R. L. Wood.
 Mine Surveyor: David Jones.
 Fireboss: F. Heaston.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 10 to 25 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 1, Sec. 12, Tp. 29, Rge. 13, W. 4th Mer.
 Coal Mining Lease Number: C.P.R. 5183.
 C.N.R. and Truck mine.
 Registered Trade Name: Sheerness Chinook.

C. Goetz—Mine No. 1314

Mine Office: Hanna, Alberta.
 Mine Manager: C. Goetz.
 Mine Surveyor: David Jones.
 Overman: J. Goetz.
 Thickness of Seam: 2½ feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 1, Sec. 6, Tp. 29, Rge. 14, West 4th Mer.
 Coal Mining Lease Number: 2840.
 Registered Trade Name: Cowan Coulee Coal.

T. G. Ironside & Sons—Mine No. 1398

Authorized Capital: \$100.00.
 Mine Office: Hanna, Alberta.
 Mine Manager: T. G. Ironside.
 Mine Surveyor: David Jones.
 Overman: T. G. Ironside.
 Thickness of Seam: 3 feet.
 Thickness of Cover: 10 feet.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 12, Sec. 5, Tp. 34, Rge. 13, W. 4th Mer.
 Coal Mining Lease Number: 5083.
 Registered Trade Name: Ironside Coal.

Fred Pahl & Sons—Mine No. 1401

Name of Secretary: Otto Pahl.
 Name of Treasurer: Fred Pahl.
 Mine Office: Hanna, Alberta.
 Mine Manager: Fred Pahl.
 Fireboss: Alfred Pahl.
 Thickness of Seam: 3½ feet.
 Thickness of Cover: 14 to 16 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: N.E. ¼ of L.S. 7, Sec. 30, Tp. 32, Rge. 13, West 4th Mer.
 Coal Mining Lease Number: 5083 C.P.R.
 Registered Trade Name: Ereka Coal.

Sheerness Coal Co., Ltd.—Mine No. 1432

Authorized Capital: \$10,000.
 Name of President: Claude Gallinger.
 Names of Directors: C. Gallinger, Mrs. Jean Gallinger.
 Name of Sec.-Treasurer: R. L. Wood.
 Mine Office: Sheerness, Alberta.
 Mine Manager: R. L. Wood.
 Mine Surveyor: David Jones.
 Overman: Henry Sward.
 Thickness of Seam: 4 to 5 feet.
 Thickness of Cover: 10 to 23 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: Sec. 19, Tp. 29, Rge. 12, West 4th Mer.
 Coal Mining Lease Number: 5027.
 C.N.R. and Truck mine.
 Registered Trade Name: Sheebo Coal.

**John Masciangelo & Partners—
Mine No. 1553**

Mine Office: Delia, Alberta.
Overman: John Masciangelo.
Mine Surveyor: David Jones.
Overman: John Maciangelo.
Thickness of Seam: 3ft. 9in.
Thickness of Cover: 20 to 70 feet.
Inclination of Seam: Horizontal.
Form of Opening: Tunnel.
Location of Mine: L.S. 10, Sec. 21, Tp. 30, Rge. 17, W. 4th Mer.
Coal Mining Lease Number: 5368.
Registered Trade Name: Blossom Mine Coal.

Bordula & Partners—Mine No. 1597

Mine Office: Hanna, Alberta.
Mine Manager: D. Jones.
Overman: A. J. Bordula.
Thickness of Seam: 5ft. 5in.
Inclination of Seam: Horizontal.
Form of Opening: Strip mine.
Location of Mine: L.S. 16, Sec. 12, Tp. 29, Rge. 13, West 4th Mer.
Coal Mining Lease Number: 5289.
Registered Trade Name: Bordula Coal.

TABER AREA

J. Annon—Mine No. 672

Mine Office: Bow Island, Alberta.
Mine Manager: J. Annon.
Mine Surveyor: J. F. Hamilton.
Overman: W. Annon.
Thickness of Seam: 4ft. 6in.
Thickness of Cover: 179 feet.
Inclination of Seam: Horizontal.
Location of Mine: L.S. 3, Sec. 27, Tp. 12, Rge. 10, W. 4th Mer.
Coal Mining Lease Number: C.P.R. 5353.
Truck mine.
Registered Trade Name: Leyland Coal.

**Continental Coal Corporation, Ltd.
Mine No. 1334**

Authorized Capital: \$2,000,000.
Name of President: C. O. Stee.
Names of Directors: N. Vincent, N. W. Campbell, R. Hughes.
Name of Sec.-Treas.: G. M. Wilton.
Mine Office: Grassy Lake, Alberta.
Mine Manager: M. G. Rhynas.
Mine Surveyor: A. Williams.
Thickness of Seam: 2 feet.
Thickness of Cover: 24 feet.
Inclination of Seam: Horizontal.
Form of Opening: Strip mine.
Location of Mine: L.S. 4, Sec. 26, Tp. 29, Rge. 13, West 4th Mer.
Coal Mining Lease Number: H.B.C. 5471.
Truck mine.
Registered Trade Name: Alburna Coal.

Oliver Coal Mine—Mine No. 1536

Mine Office: Taber, Alberta.
Mine Surveyor: J. F. Hamilton.
Overman: Evan Evans.
Thickness of Seam: 3ft. 8in.
Thickness of Cover: 90 feet.
Inclination of Seam: Horizontal.
Form of Opening: Drift.
Location of Mine: Sec. 18, Tp. 10, Rge. 16, West 4th Mer.
Coal Mining Lease Number: M.S. 438, 462.
Registered Trade Name: Oliver Senior Coal.

**Southern Alberta Coal Co. Ltd.—
Mine No. 1609**

Authorized Capital: 200 shares N.P.V.
Names of Directors: E. Connelly, R. Jennings, M. G. Rhynas, R. L. Abr.
Name of President: Melville G. Rhynas.
Name of Sec.-Treas.: E. Connelly.
Head Office: 334 8th Ave. W., Calgary, Alberta.
Mine Office: Taber, Alberta.
Mine Manager: M. G. Rhynas.

Mine Surveyor: M. G. Rhynas.
Thickness of Seam: 36 to 40 feet.
Thickness of Cover: 15 to 45 feet.
Inclination of Seam: Horizontal.
Form of Opening: Strip mine.
Location of Mine: Sec. 30, Tp. 10, Rge. 16, W. 4th Mer.
Coal Mining Lease Number: M.S. 554.
C.P.R. and Truck mine.
Registered Trade Name: Southalta Coal.

TOFIELD AREA

Emil Skarin—Mine No. 215

Head Office: 11115 89 Ave., Edmonton.
Mine Office: Dodds, Alberta.
Mine Surveyor: David Jones.
Overman: Alfred Oas.
Thickness of Seam: 3ft. to 7ft.
Thickness of Cover: 12 ft. to 22ft.
Inclination of Seam: Horizontal.
Form of Opening: Strip mine.
Location of Mine: L.S. 7, Sec. 14, Tp. 49, Rge. 18, W. 4th Mer.
Coal Mining Lease Number: 5544, 5545.
C.N.R. and Truck mine.
Registered Trade Name: North Star Coal.

Tofield Coal Co., Ltd.—Mine No. 252

Authorized Capital: \$100,000.
Name of President: Claude Gallinger.
Names of Directors: C. Gallinger, Mrs. Jean Gallinger.
Name of Sec.-Treas.: Wilber Gallinger.
Mine Office: Tofield, Alberta.
Mine Manager: Norman E. Scott.
Mine Surveyor: David Jones.
Fireboss: Anton Johnson.
Thickness of Seam: 6 feet.
Thickness of Cover: 20 feet.
Inclination of Seam: Horizontal.
Location of Mine: Sec. 26, Tp. 50, Rge. 19, West 4th Mer.
Coal Mining Lease: H.B.C.
C.N.R. and Truck mine.
Registered Trade Name: Headlight Coal.

**The Black Nugget Coal Co. Ltd.—
Mine No. 1107**

Authorized Capital: \$50,000.
Name of President: F. L. Irving.
Names of Directors: Charles M. Ellis, Donald F. Irving, F. L. Irving.
Name of Sec.-Treas.: S. H. Roe.
Head Office: 604 McLean Block, Calgary.
Mine Office: Ryley Alberta.
Mine Manager: D. F. Irving.
Mine Surveyor: David Jones.
Overman: Frank Kinzerski.
Thickness of Seam: 6 feet.
Thickness of Cover: 25 feet.
Inclination of Seam: Horizontal.
Form of Opening: Strip mine.
Location of Mine: Sec. 11, Tp. 49, Rge. 18, West 4th Mer.
Coal Mining Lease Number: S.L. 262, S.L. 530.
C.N.R. and Truck mine.
Registered Trade Name: The Black Nugget Coal Co. Ltd.

Ryley Coal Company—Mine No. 1206

Authorized Capital: \$6,000.00.
Mine Office: Ryley Alberta.
Overman: M. Zaharchuk.
Thickness of Seam: 12 feet.
Thickness of Cover: 12 feet.
Inclination of Seam: Horizontal.
Form of Opening: Slope. Size of Slope: 8ft. by 8 ft. Depth of Slope: 55 feet.
Location of Mine: L.S. 8, Sec. 8, Tp. 49, Rge. 17, W. 4th Mer.
Coal Mining Lease Number: 1206.
Truck mine.
Registered Trade Name: Ryley Coal Co.

C. Binder—Mine No. 1624

Authorized Capital: \$8,000.00.
Mine Office: Ryley, Alberta.
Overman: C. Binder.

Thickness of Seam: 9ft. 9in.
 Thickness of Cover: 22 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 7ft. by 10ft. Depth of Slope: 80 feet.
 Location of Mine: L.S. 5, Sec. 9, Tp. 49,
 Rge. 17, W. 4th Mer.
 Coal Mining Lease Number: 613.
 C.N.R. and Truck mine.
 Registered Trade Name: Ryalta Coal.

WESTLOCK AREA

Picardville Coal Co.—Mine No. 1523

Mine Office: Picardville, Alberta.
 Mine Manager: A. J. Beardsley.
 Mine Surveyor: David Jones.
 Overman: A. J. Beardsley.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 40 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 10ft. by 8ft. Depth of Slope: 135 feet.
 Location of Mine: E. $\frac{1}{2}$ of L.S. 8, Sec.
 25, Tp. 58, Rge. 27, West 4th Mer.
 Coal Mining Lease Number: 5283.
 Truck mine.
 Registered Trade Name: Picardville Coal.

WETASKIWIN AREA

Gill Brothers—Mine No. 1534

Mine Office: R.R. No. 2, Thorsby, Alta.
 Mine Surveyor: L. C. Stevens.
 Overman: Joe Gill.
 Fireboss: Pete Gill.
 Thickness of Seam: 48 inches.
 Thickness of Cover: 100 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Slope. Size of Slope:
 6ft. by 7ft. Depth of Slope: 800 feet.
 Location of Mine: L.S. 7, Sec. 3, Tp. 48,
 Rge. 27, West 4th Mer.
 Coal Mining Lease Number: L.S. 553.
 Registered Trade Name: Canyon Creek
 Coal.

Paul Offroy—Mine No. 1656

Authorized Capital: \$3,000.00.
 Mine Office: R.R. No. 4, Calmar, Alta.
 Mine Manager: P. Offroy.

Mine Surveyor: L. C. Stevens.
 Overman: Paul Offroy.
 Thickness of Seam: 5 feet.
 Thickness of Cover: 150 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Tunnel.
 Location of Mine: L.S. 11 and 12, Sec. 3,
 Tp. 48, Rge. 27, West of 4th Mer.
 Coal Mining Lease Number: C.P.R. 635.
 Truck mine.
 Registered Trade Name: Lake Centre
 Coal.

WHITECOURT AREA

Alex. Watson—Mine No. 1569

Mine Office: Blue Ridge.
 Mine Manager: A. Watson.
 Mine Surveyor: David Jones.
 Thickness of Seam: 3ft. 8in.
 Thickness of Cover: 9 to 25 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: L.S. 16, Sec. 24, Tp.
 59, Rge. 11, West 5th Mer.
 Coal Mining Lease Number: 5354.
 Truck mine.
 Registered Trade Name: Blue Ridge
 Coal.

NO AREA

Pinto Creek Collieries Ltd.— Mine No. 1616

Authorized Capital: \$100,000.00.
 Name of President: Dr. W. E. Doupe.
 Names of Directors: W. E. Doupe, S. J.
 Halwa, E. Jacobs.
 Name of Secretary: D. W. Patterson.
 Name of Treasurer: W. E. Doupe.
 Mine Office: Wembley, Alberta.
 Mine Manager: Dr. W. E. Doupe.
 Mine Surveyor: L. C. Stevens.
 Thickness of Seam: 61 inches.
 Thickness of Cover: 15 feet.
 Inclination of Seam: Horizontal.
 Form of Opening: Strip mine.
 Location of Mine: Unsurveyed territory.
 Coal Mining Lease Number: 5598.
 N.A.R. and Truck mine.
 Registered Trade Name: Pinto Creek
 Coal.

The following table gives particulars of mines which were in operation during the year 1947 in the Province:

LIST OF MINES

Mine No.	Operator	Address	Location LS.S.T.R.M.	Character of Coal	Date of Opening
Ardley Area					
809	J. W. Sissons	Alix	16 and 15-23-38-23-4	Sub-bituminous	1919
969	James Blades	Delburne	14-10-38-22-4	Sub-bituminous	1921
1018	A. Anderson	Ardley	3-17-38-23-4	Sub-bituminous	1922
1135	Carl Kurpas	Delburne	16-7-38-23-4	Sub-bituminous	1924
1222	John Lybass	Delburne	16-7-38-23-4	Sub-bituminous	1930
1438	Charles O. Russell	Alix	3-29-38-23-4	Sub-bituminous	1935
1586	Karl & McGladrie	Nevils	4-3-33-37-22-4	Sub-bituminous	1942
1605	Myers & Munro	Ardley	12-33-38-23-4	Sub-bituminous	1943
1613	Wm. Barrell and A. Auvinne	Ardley	10-20-38-23-4	Sub-bituminous	1943
1662	W. S. Underwood	Ponoka	15-10-38-22-4	Sub-bituminous	1947
1663	Wm. G. Martin	Delburne	E. 1/2 L.S. 15 & W. 1/2 16-22-37-22-4	Sub-bituminous	1947
Big Valley Area					
864	Big Valley Coal Company	Big Valley	16-26-35-20-4	Sub-bituminous	1920
1254	Robert Campkin	Lousana	16-12-36-22-4	Sub-bituminous	1927
1661	Robert Campkin & Sons	Lousana	1-23-36-22-4	Sub-bituminous	1947
Brooks Area					
1404	Birmwel Coal, Ltd.	Eyremore	15-17-17-4	Sub-bituminous	1932
Camrose Area					
241	Joe Proskow	Dinant	4-18-48-19-4	Sub-bituminous	1910
610	L. Strilezyk	Ohaton	8-10-48-18-4	Sub-bituminous	1915
724	S. H. Burnstad	Ohaton	3-6-14-48-18-4	Sub-bituminous	1917
1420	Red Flame Coal Co., Ltd.	Round Hill	14-19-48-18-4	Sub-bituminous	1933
1524	Geo. Shute & Partners	Dinant	7-48-19-4	Sub-bituminous	1937
1603	Alberta Coal Co., Ltd.	Camrose	2, 6, 7, 10-11-15-29-46-19-4	Sub-bituminous	1943
Carbon Area					
53	A. Fox (Kneehill Mine)	Carbon	S.W. 1/4	Sub-bituminous	1898
194	Kneehill Coal Co. Ltd.	Three Hills	N.E. 1/4	Sub-bituminous	1909
284	Inland Coal Co., Ltd.	Three Hills	3-36-31-24-4	Sub-bituminous	1913
690	J. W. Rynning	Rowley	4-13-32-21-4	Sub-bituminous	1917
710	East Trochu Coal Co.	Trochu	9-14-33-23-4	Sub-bituminous	1917
817	E. Pickering	Ghost Pine Creek	1-2-6-31-21-4	Sub-bituminous	1919
821	E. Reissig	Trochu	15-14-33-23-4	Sub-bituminous	1919
1060	East Carbon Coal Co.	Carbon	12-13-7-29-22-4	Sub-bituminous	1922
1226	C. C. Campbell	Trochu	9-29-33-22-4	Sub-bituminous	1926

LIST OF MINES—Continued

Mine No.	Operator	Address	Location	I.S.S.T.R.M.	Character of Coal	Date of Opening
1783	A. E. Staitte	Trochu		8-14-33-23-4	Sub-bituminous	1928
1359	Balogh Brothers	Carbon		16-12-29-23-4	Sub-bituminous	1931
1499	Nuttall & Davidson	Three Hills		1-9-31-22-4	Sub-bituminous	1936
1600	Peerless Coal Co.	Carbon		2-15-29-23-4	Sub-bituminous	1943
1621	Sarcee Coal Co.	Ghost Pine Creek		8-10-31-22-4	Sub-bituminous	1944
Cascade Area						
2	The Canmore Mines, Ltd.	Canmore	N.E. ¼	1-29-24-10-5	Bituminous	1891
1244	Frank Wheatley & Sons	Banff		12-4-26-11-5	Bituminous	1926
1667	Kanastota Exploration & Development Co. Ltd.	Seebe	N.E. ¼	7 & 8-3-23-9-5	Bituminous	1947
Castor Area						
251	John Tyrlik	Heisler	S.W. ¼	16-28-42-17-4	Sub-bituminous	1910
289	Bailey & Strader	Gadsby	N.W. ¼	11-28-39-16-4	Sub-bituminous	1911
291	James Chiswick	Gadsby	S. ½	11-28-39-16-4	Sub-bituminous	1911
447	A. J. James & E. J. Boyce	Forestburg		13-28-40-15-4	Sub-bituminous	1914
615	J. Komperdo & Sons	Heisler	S. ½	13-22-42-17-4	Sub-bituminous	1915
666	Killam Man. Co., Ltd.	Forestburg		16-2-41-16-4	Sub-bituminous	1916
902	O. V. Remillard	Castor		16-33-37-14-4	Sub-bituminous	1921
911	Strickland and Partners	Heisler		1-7-39-15-4	Sub-bituminous	1921
913	Ben Hronek	Halkirk		1-33-42-17-4	Sub-bituminous	1921
953	D. H. Wiltse and Krammer	Forestburg		1-8-32-40-15-4	Sub-bituminous	1921
1046	J. F. Cordel	Halkirk		6-20-40-15-4	Sub-bituminous	1922
1062	Chas. Strader	Halkirk		4-17-39-15-4	Sub-bituminous	1922
1232	J. H. Ainsworth	Halkirk	N.W. ¼	25-40-16-4	Sub-bituminous	1926
1240	G. Stoller & J. Filipenko	Halkirk		11-8-39-15-4	Sub-bituminous	1926
1248	Thomas Mitchinson	Castor		1-2-4-38-14-4	Sub-bituminous	1926
1417	James Easton	Edberg	10	11-29-41-17-4	Sub-bituminous	1926
1435	E. Olsen	Edberg		14-34-37-14-4	Sub-bituminous	1933
1441	J. W. Marshall	Donalda	S.W. ¼	6-11-2-44-19-4	Sub-bituminous	1933
1541	H. C. Muncy	Donalda		12-16-42-17-4	Sub-bituminous	1933
1572	Ammonson, Ammonson & Radford	Donalda		15-26-40-16-4	Sub-bituminous	1938
1578	Bish Bros	Donalda		5-28-41-17-4	Sub-bituminous	1940
1587	J. J. Mills	Heisler		15-36-40-16-4	Sub-bituminous	1940
1608	Castor Coal & Construction Co. Ltd.	Castor	Pt. of	5-22-42-17-4	Sub-bituminous	1942
1614	Alfred Sorken	Killam		3-38-14-4	Sub-bituminous	1942
1634	F. N. Wiltse	Halkirk		16-26-40-16-4	Sub-bituminous	1943
1639	A. T. Miner	Rosalind	W. ½	11-32-39-15-4	Sub-bituminous	1945
1642	J. Bradley & A. O'Brien	Halkirk		4-43-17-4	Sub-bituminous	1945
1650	Wm. Jones	Forestburg		14-25-40-16-4	Sub-bituminous	1946
1655	C. R. Grettum & M. J. Sands	Edberg		10-32-40-15-4	Sub-bituminous	1946
				3, 9 & 10-14-43-20-4	Sub-bituminous	1947

136	George Rhodes	Champion	7- 8-15-22-4	Sub-bituminous	1907
1509	P. Fontana & Sons	Champion	13-33-15-23-4	Sub-bituminous	1937
1565	Mike Popovich	Champion	9- 8-16-23-4	Sub-bituminous	1939
Coalspur Area					
769	Sterling Collieries Co., Ltd.	Sterco	12-35-47-20-5	Bituminous	1918
771	Foothills Collieries, Ltd., The	Foothills	10-24-47-20-5	Bituminous	1918
775	Lakeside Coals, Ltd.	Robb	3-14-49-21-5	Bituminous	1918
846	McLeod River Hard Coal Co. (1941), Ltd.	Mercoal	5-25-48-22-5	Bituminous	1920
1002	Coal Valley Mining Co., Ltd.	Coal Valley	16-26-47-20-5	Bituminous	1922
1157	Bryan Hard Coal Co., Ltd.	Robb	11-15-49-21-5	Bituminous	1924
Crowsnest Area					
87	West Canadian Collieries, Ltd.	Bellevue	10-20- 7- 3-5	Bituminous	1903
88	International Coal & Coke Co., Ltd.	Coleman	11- 8- 8- 4-5	Bituminous	1903
133	Hillcrest-Mohawk Collieries, Ltd.	Bellevue	21- 7- 3-5	Bituminous	1907
199	Matt Wood	Beaver Mines	10- 3- 6- 3-5	Bituminous	1909
204	McGillivray Creek Coal & Coke Co., Ltd.	Coleman	2- 17- 8- 4-5	Bituminous	1909
396	West Canadian Collieries, Ltd.	Blairmore	10- 2- 8- 4-5	Bituminous	1913
1584	West Canadian Collieries, Ltd.	Blairmore	15-31- 6- 3-5	Bituminous	1942
Drumheller Area					
346	Rosedale Collieries, Ltd.	Rosedale	14-28-28-19-4	Sub-bituminous	1912
367	Midland Coal Mining Co., Ltd.	Drumheller	14- 9-29-20-4	Sub-bituminous	1912
402	Red Deer Valley Coal Co., Ltd.	Drumheller	7-29-20-4	Sub-bituminous	1913
422	Commander Coal Company	Drumheller	5- 9-29-20-4	Sub-bituminous	1914
436	Rosedale Collieries, Ltd.	Aerial	7-28-28-19-4	Sub-bituminous	1914
620	Newcastle Collieries, Ltd.	Drumheller	3-29-20-4	Sub-bituminous	1915
728	Maple Leaf Coal Co., Ltd.	Drumheller	13-32-27-18-4	Sub-bituminous	1918
1117	O. W. Whittraker	Beynon	3- 6-28-20-4	Sub-bituminous	1923
1258	Brilliant Coal Co.	Drumheller	14-10-29-20-4	Sub-bituminous	1927
1299	Sask. Federated Co-ops. Ltd.	East Coulee	2-32-27-18-4	Sub-bituminous	1929
1421	Hy-Grade Coal Mining Co., Ltd.	Drumheller	13-11-29-20-4	Sub-bituminous	1933
1484	Regal Coal Co., Ltd.	Drumheller	13-21-27-18-4	Sub-bituminous	1933
1486	H. Burtoft	Drumheller	13-20-28-19-4	Sub-bituminous	1935
1493	Murray Collieries, Ltd.	Drumheller	29-27-18-4	Sub-bituminous	1936
1493	Western Gem & Jewel Collieries, Ltd.	Cambria P.O.	6-15-28-19-4	Sub-bituminous	1936
1511	Aetna Coal Company	Wayne	1-22-28-19-4	Sub-bituminous	1937
1515	H. S. Chambers	Willow Creek	10-22-28-18-4	Sub-bituminous	1937
1520	The Minute Coal Company	Drumheller	17-14-28-20-4	Sub-bituminous	1937
1544	Wayne Co-op. Ass'n, Ltd.	Wayne	16- 7-28-19-4	Sub-bituminous	1938
1570	Sovereign Coal Co., Ltd.	Wayne	8- 7-28-19-4	Sub-bituminous	1940
1573	Monarch Coal Mining Co., Ltd.	Drumheller	1-20-27-18-4	Sub-bituminous	1940

LIST OF MINES—Continued

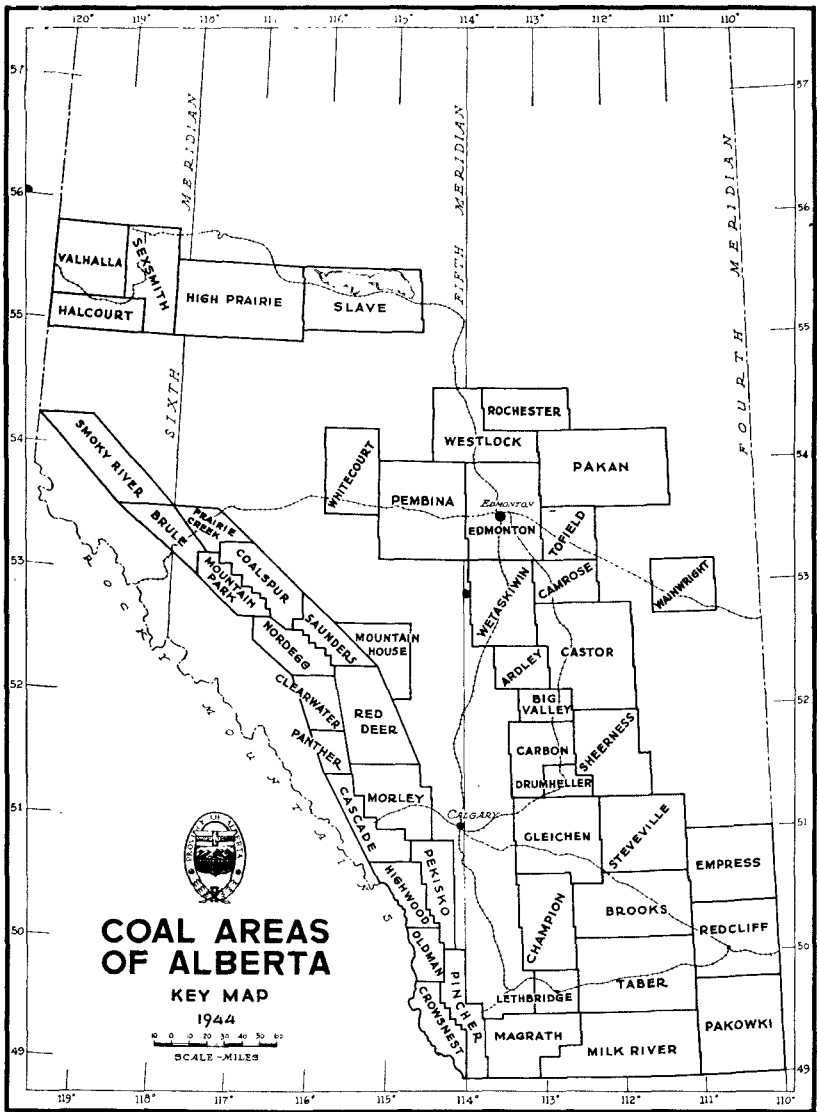
Mine No.	Operator	Address	Location	L.S.T.R.M.	Character of Coal	Date of Opening
1583	John Hamilton	Delia	N. ¼	7 & 10-23-28-18-4	Sub-bituminous	1942
1589	Arcadia Coal Mines, Ltd.	Willow Creek		16- 7-28-18-4	Sub-bituminous	1943
1599	H. S. Chambers	Drumheller	W. & E. ½	22-28-18-4	Sub-bituminous	1943
1655	Wm. Oshatzchan	Drumheller		9 & 10-22-29-20-4	Sub-bituminous	1947
1660	John S. Hacker	Wayne		2 & 3-18-28-19-4	Sub-bituminous	1947
1666	Allan Livingstone	Nacmine		16-16-28-19-4	Sub-bituminous	1947
Edmonton Area						
29	E. Woytowich & Senetchko	South Edmonton		11-25-51-25-4	Sub-bituminous	1897
91	Ottewell Coal Company	Clover Bar	S.W. ¼	4-17-53-23-4	Sub-bituminous	1904
99	Great West Coal Co., Ltd.	Clover Bar	S.E. ¼	10- 7-53-23-4	Sub-bituminous	1903
129	Sundance Mines, Ltd.	Cardiff		16-23-55-23-4	Sub-bituminous	1907
428	Banner Coals, Ltd.	Cardiff		10- 8-55-24-4	Sub-bituminous	1914
1034	Black Point Coal Co. Ltd.	South Edmonton		6-25-51-25-4	Sub-bituminous	1922
1098	Long Coal Company	Namoo		4-31-54-24-4	Sub-bituminous	1923
1266	Edmonton Collieries, Ltd.	Namoo		14-36-54-25-4	Sub-bituminous	1927
1316	Sams Collieries	Edmonton		6-36-54-25-4	Sub-bituminous	1929
1357	Red Hot Coal Co., Ltd.	Edmonton	R.L. 33 Edmonton Sett.		Sub-bituminous	1931
1366	Beverly Coal, Ltd.	Beverly		6-13-53-24-4	Sub-bituminous	1931
1393	Ottewell Coal Company	Clover Bar	Block X, N.E. ¼	36-52-24-4	Sub-bituminous	1932
1419	Pine Creek Coal Co. Ltd.	South Edmonton		4-25-51-25-4	Sub-bituminous	1933
1463	Riverdale Coal Co., Ltd.	Edmonton	S.W. ¼	8-55-24-4	Sub-bituminous	1934
1496	G. S. Gwilliam	Namoo		3- 6-55-24-4	Sub-bituminous	1936
1560	K. Nimko	South Edmonton		11-25-51-25-4	Sub-bituminous	1939
1582	Egg Lake Coal Co.	Morinville	N.E. ¼	36-56-26-4	Sub-bituminous	1941
1626	J. B. Starky Co., Ltd.	Cardiff	S.E. ¼	4-36-55-25-4	Sub-bituminous	1945
1628	Dickinson, Knight & Dickinson	Cardiff		17-55-24-4	Sub-bituminous	1945
1632	Blue Point Mine	South Edmonton	N. ¼	15-23-51-25-4	Sub-bituminous	1945
1635	C. F. MacLachlan	Edmonton		8-9- 2-53-21-4	Sub-bituminous	1945
1636	Morinville Collieries Ltd.	Legal		1-22-55-25-4	Sub-bituminous	1945
1641	J. B. St. Martin	Cardiff		11-14-26-57-23-4	Sub-bituminous	1945
1641	A. Horkulak	Edmonton	E. ½	15- 6-56-51-23-4	Sub-bituminous	1946
1646	J. G. Mucha	South Edmonton		13-25-51-25-4	Sub-bituminous	1946
1656	Paul J. Offroy	Thorsby		11 & 12- 3-48-27-4	Sub-bituminous	1947
1658	T. Opalinski	Ellerslie		13-25-51-25-4	Sub-bituminous	1947
Gleichen Area						
72	Blackfoot Indians	Gleichen	Indian Reserve		Sub-bituminous	1902
299	K. J. Schnepf	Rosebud	S. ½	4 & 5-29-26-21-4	Sub-bituminous	1911
1265	Hans Castella & Sons	Standard		5-11-25-22-4	Sub-bituminous	1927
1431	John Guiney	Rosebud		3-29-26-21-4	Sub-bituminous	1933
1521	Wm. McMillan	Rosebud		14-20-26-21-4	Sub-bituminous	1937

Halcourt Area					
651	Baldwin Collieries, Ltd.	Grande Prairie	15-35-70- 7-6	Bituminous	1916
1388	Cage Brothers	Halcourt	14-24-70-11-6	Bituminous	1942
1633	Wm. Fraser	Halcourt	8-21-70-10-6	Bituminous	1945
1647	R. O. Johnston & Sons	Grande Prairie	Unsurveyed territory	Bituminous	1946
1651	C. D. Grubb	Hualien	69- 5-6 1-18-70- 9-6	Bituminous	1946
Lethbridge Area					
56	A. Razzolini	Magrath	3- 7- 7-21-4	Bituminous	1902
738	George Rollinson	Lethbridge	2-11- 8-22-4	Bituminous	1909
1086	J. Forsyth & Partners	Magrath	5- 8- 7-21-4	Bituminous	1923
1095	J. C. Chester	Lethbridge	9-30- 9-21-4	Bituminous	1923
1263	Lethbridge Collieries, Ltd.	Shaughnessy	11-30-10-21-4	Bituminous	1927
1464	Lethbridge Collieries, Ltd.	Lethbridge	3- 2- 9-22-4	Bituminous	1934
1581	J. J. Hamilton Coal Co.	Lethbridge	11-24- 9-22-4	Bituminous	1941
1602	Vulcan Mining & Construc. Co. Ltd.	Vulcan	7- 7-21-4	Bituminous	1946
Milk River Area					
1301	Thos. Taylor	Groton	8-9-10-10- 3-11-4	Sub-bituminous	1929
1380	Lucky Strike Coal Co., Ltd.	Masinasin	10-27- 2-12-4	Sub-bituminous	1931
1659	F. W. Duggan	Milk River	10, 14, 15 & 16-27- 2-12-4	Sub-bituminous	1947
Morley Area					
1619	B. Ainsley & Sons	Morley	Unsurveyed territory	Bituminous	1944
Mountain Park Area					
282	Mountain Park Coals, Ltd.	Mountain Park	23-45-23-5	Bituminous	1911
693	Cadomin Coal Co., Ltd.	Cadomin	14-31-46-23-5	Bituminous	1917
905	Luscar Coals, Ltd.	Luscar	7-23-47-24-5	Bituminous	1921
1392	Gregg River Collieries Ltd.	Gregg River	8-28-47-24-5	Bituminous	1932
1631	King's Coal, Ltd.	Cadomin	L.S. 2, 5, 6, 7, 8-10-11-36-47-24-5	Bituminous	1945
Nordegg Area					
256	Brazeau Collieries, Ltd.	Nordegg	13-22-40-15-5	Bituminous	1910
Pakowki Area					
1318	W. Raeder	Elkwater	10-23- 8- 3-4	Sub-bituminous	1929
Pekisko Area					
1516	G. C. Davies	Priddis	10- 4-22- 3-5	Bituminous	1937
1638	E. Payne	Turner Valley	7-24-19- 6-5	Bituminous	1945

LIST OF MINES—Continued

Mine No.	Operator	Address	Location	LS.S.T.R.M.	Character of Coal	Date of Opening
Pembina Area						
419	Lakeside Coals, Ltd.	Wabamun	S.E. $\frac{1}{4}$	15- 9-53- 4-5	Sub-bituminous	1913
1409	Gainford Collieries (1946), Ltd.	Gainford	N.W. $\frac{1}{4}$	36-53- 6-5	Sub-bituminous	1932
1495	Pembina Collieries, Ltd.	Entwistle	E. $\frac{1}{2}$	34-53- 7-5	Sub-bituminous	1936
1592	Donvie Collieries Ltd.	Gainford		30-52- 4-5	Sub-bituminous	1943
1596	Wm. Robinson	Entwistle		5-34-53- 7-5	Sub-bituminous	1944
1630	Lake Isle Mine	Gainford	S.W. $\frac{1}{4}$	31-53- 5-5	Sub-bituminous	1945
1644	Strawberry Creek Coal Co. Ltd.	Warburg		6-11-13-49- 3-5	Sub-bituminous	1946
1645	Lothian Collieries	Wabamun	N.W. $\frac{1}{4}$	10-53- 4-5	Sub-bituminous	1946
1649	K. Schon	Moon Lake		23-24-49- 7-5	Sub-bituminous	1946
1652	N. Fry & T. Larson	Seba Beach		16-25-53- 6-5	Sub-bituminous	1946
1657	J. Lidgett & L. Opheim	Entwistle	S. $\frac{1}{2}$	9 & 16-10-54- 7-5	Sub-bituminous	1947
Pincher Area						
59	Keith Coal Co.	Lundbreck	S.W. $\frac{1}{4}$	15-26- 7- 2-5	Bituminous	1902
1440	W. B. Rhodes	Lundbreck		10-26- 7- 2-5	Bituminous	1933
1653	C. M. Woodley & Partners	Hinton		4-29-50-25-5	Bituminous	1946
772	Naco Coal Co. Ltd.	Medicine Hat		2- 5-13- 6-4	Sub-bituminous	1918
Rochester Area						
1517	Thorhild Coal Co.	Thorhild	N. & S. $\frac{1}{2}$	12 & 13-12-60-21-4	Sub-bituminous	1937
1562	North Point Coal Co. Ltd.	Thorhild		1-11-60-21-4	Sub-bituminous	1939
Saunders Area						
388	Bighorn & Saunders Creek Coll., Ltd.	Saunders	S.E. $\frac{1}{4}$	9-24-40-13-5	Bituminous	1913
852	Alexo Coal Co., Ltd.	Alexo	N.W. $\frac{1}{4}$	9-27-40-13-5	Bituminous	1920
Sheerness Area						
443	Chinook Coal Co., Ltd.	Sheerness		1-12-29-13-4	Sub-bituminous	1914
486	Little Brothers	Hanna		6-29-32-13-4	Sub-bituminous	1915
1314	C. Gaetz	Hanna	S.W. $\frac{1}{4}$	1- 6-29-14-4	Sub-bituminous	1929
1398	T. G. Ironside & A Glover	Scapa		12- 5-34-13-4	Sub-bituminous	1932

1401	F. H. Pahl	Hanna	N.E. ¼	7-30-32-13-4	Sub-bituminous	1932
1432	Sheerness Coal Co., Ltd.	Sheerness		5-19-29-12-4	Sub-bituminous	1933
1553	John Masciangelo & Partners	Della		10-21-30-17-4	Sub-bituminous	1939
1597	Bordula & Partners	Hanna		16-12-29-13-4	Sub-bituminous	1943
Taber Area						
672	J. Annon	Bow Island		3-27-12-10-4	Sub-bituminous	1916
838	D. McCracken & Goring	Alderson		7-28-12-10-4	Sub-bituminous	1919
1334	Continental Coal Corporation	Grassy Lake		4-26-9-13-4	Sub-bituminous	1930
1536	Oliver Coal Mine	Taber		2-18-10-16-4	Sub-bituminous	1938
1609	Southern Alberta Coal Co. Ltd.	Taber		30-10-16-4	Sub-bituminous	1943
Tofield Area						
215	Emil Skarin	Dodds	N. ½	7-14-49-18-4	Sub-bituminous	1909
252	Tofield Coal Co., Ltd.	Tofield		26-50-19-4	Sub-bituminous	1910
1107	Black Nugget Coal Co., Ltd.	Dodds		15-11-49-18-4	Sub-bituminous	1923
1206	Ryey Coal Company	Ryey		8-8-49-17-4	Sub-bituminous	1925
1624	C. Binder	Ryey		5-9-49-17-4	Sub-bituminous	1944
Westlock Area						
1523	Picardville Coal Co.	Picardville	E. ½	8-35-58-27-4	Sub-bituminous	1945
Wetaskiwin Area						
1534	Peter Gill	Thorsby		7-3-48-27-4	Sub-bituminous	1938
Whitcourt Area						
1569	Alex Watson	Blue Ridge		16-24-59-11-5	Sub-bituminous	1940
No Area						
1616	Pinto Creek Collieries Ltd.	Wembley	Unsurveyed territory		Bituminous	1943



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